Chapter 1 : Project MUSE - Bibliography

Book Description: This book is a collection of highly innovative research ideas, strategies, focal points related to biological cell model systems, promoting both genomic research and bioinformatics that are starting points for instance of the system biology and future research in this field.

Messkirch was then a quiet, conservative, religious rural town, and as such was a formative influence on Heidegger and his philosophical thought. In he spent two weeks in the Jesuit order before leaving probably on health grounds to study theology at the University of Freiburg. In he switched subjects, to philosophy. He began teaching at Freiburg in From this platform he proceeded to engage deeply with Kant, Kierkegaard, Nietzsche, and, perhaps most importantly of all for his subsequent thinking in the s, two further figures: Dilthey whose stress on the role of interpretation and history in the study of human activity profoundly influenced Heidegger and Husserl whose understanding of phenomenology as a science of essences he was destined to reject. In Husserl took up a post at Freiburg and in Heidegger became his assistant. Heidegger spent a period of reputedly brilliant teaching at the University of Marburg â€", but then returned to Freiburg to take up the chair vacated by Husserl on his retirement. Published in , Being and Time is standardly hailed as one of the most significant texts in the canon of what has come to be called contemporary European or Continental Philosophy. A cross-section of broadly analytic reactions to Heidegger positive and negative may be found alongside other responses in Murray Being and Time is discussed in section 2 of this article. During the short period of his rectorshipâ€"he resigned in â€"Heidegger gave a number of public speeches including his inaugural rectoral address; see below in which Nazi images plus occasional declarations of support for Hitler are integrated with the philosophical language of Being and Time. After Heidegger became increasingly distanced from Nazi politics. After the war, however, a university denazification committee at Freiburg investigated Heidegger and banned him from teaching, a right which he did not get back until One year later he was made professor Emeritus. Exactly when this occurs is a matter of debate, although it is probably safe to say that it is in progress by and largely established by the early s. If dating the turn has its problems, saying exactly what it involves is altogether more challenging. Indeed, Heidegger himself characterized it not as a turn in his own thinking or at least in his thinking alone but as a turn in Being. This uncompromising text was written in â€"7, but was not published in German until and not in English translation until Heidegger died in Freiburg on May 26, He was buried in Messkirch. According to this latter gloss, the linguistic constructions concernedâ€"which involve hyphenations, unusual prefixes and uncommon suffixesâ€"reveal the hidden meanings and resonances of ordinary talk. In any case, for many readers, the initially strange and difficult language of Being and Time is fully vindicated by the realization that Heidegger is struggling to say things for which our conventional terms and linguistic constructions are ultimately inadequate. It was meant to have two parts, each of which was supposed to be divided into three divisions. What we have published under the title of Being and Time are the first two divisions of the intended part one. The reasons for this incompleteness will be explored later in this article. For the young Heidegger, then, it is already the case that phenomenological analysis starts not with Husserlian intentionality the consciousness of objects, but rather with an interpretation of the pre-theoretical conditions for there to be such intentionality. Thus the unity of the different modes of Being is grounded in a capacity for taking-as making-present-to that Aristotle argues is the essence of human existence. For more on the philosophical relationship between Husserl and Heidegger, see e. Consider some philosophical problems that will be familiar from introductory metaphysics classes: Does the table that I think I see before me exist? Does mind, conceived as an entity distinct from body, exist? These questions have the following form: But Heidegger does, which is why he raises the more fundamental question: This is one way of asking what Heidegger calls the question of the meaning of Being, and Being and Time is an investigation into that question. The question of the meaning of Being is concerned with what it is that makes beings intelligible as beings, and whatever that factor Being is, it is seemingly not itself simply another being among

beings. But to think of Being in this way would be to commit the very mistake that the capitalization is supposed to help us avoid. For while Being is always the Being of some entity, Being is not itself some kind of higher-order being waiting to be discovered. As long as we remain alert to this worry, we can follow the otherwise helpful path of capitalization. Heidegger means by this that the history of Western thought has failed to heed the ontological difference, and so has articulated Being precisely as a kind of ultimate being, as evidenced by a series of namings of Being, for example as idea, energeia, substance, monad or will to power. In this way Being as such has been forgotten. So Heidegger sets himself the task of recovering the question of the meaning of Being. In this context he draws two distinctions between different kinds of inquiry. The first, which is just another way of expressing the ontological difference, is between the ontical and the ontological, where the former is concerned with facts about entities and the latter is concerned with the meaning of Being, with how entities are intelligible as entities. The second distinction between different kinds of inquiry, drawn within the category of the ontological, is between regional ontology and fundamental ontology, where the former is concerned with the ontologies of particular domains, say biology or banking, and the latter is concerned with the a priori, transcendental conditions that make possible particular modes of Being i. For the ontical presupposes the regional-ontological, which in turn presupposes Heidegger, the fundamental-ontological. As he puts it: The question of Being aims… at ascertaining the a priori conditions not only for the possibility of the sciences which examine beings as beings of such and such a type, and, in doing so, already operate with an understanding of Being, but also for the possibility of those ontologies themselves which are prior to the ontical sciences and which provide their foundations. Basically, all ontology, no matter how rich and firmly compacted a system of categories it has at its disposal, remains blind and perverted from its ownmost aim, if it has not first adequately clarified the meaning of Being, and conceived this clarification as its fundamental task. Being and Time 3: So how do we carry out fundamental ontology, and thus answer the question of the meaning of Being? It is here that Heidegger introduces the notion of Dasein Da-sein: That said, one needs to be careful about precisely what sort of entity we are talking about here. As Haugeland notes, there is an analogy here, one that Heidegger himself draws, with the way in which we might think of a language existing as an entity, that is, as a communally shared way of speaking. This appeal to the community will assume a distinctive philosophical shape as the argument of Being and Time progresses. The foregoing considerations bring an important question to the fore: Here there are broadly speaking two routes that one might take through the text of Being and Time. The first unfolds as follows. If we look around at beings in generalâ€"from particles to planets, ants to apesâ€"it is human beings alone who are able to encounter the question of what it means to be e. More specifically, it is human beings alone who a operate in their everyday activities with an understanding of Being although, as we shall see, one which is pre-ontological, in that it is implicit and vague and b are able to reflect upon what it means to be. Mulhall, who tends to pursue this way of characterizing Dasein, develops the idea by explaining that while inanimate objects merely persist through time and while plants and non-human animals have their lives determined entirely by the demands of survival and reproduction, human beings lead their lives Mulhall, This gives us a sense of human freedom, one that will be unpacked more carefully below. The second route to an understanding of Dasein, and thus of what is special about human beings as such, emphasizes the link with the taking-as structure highlighted earlier. Sheehan develops just such a line of exegesis by combining two insights. These dual insights lead to a characterization of Dasein as the having-to-be-open. In other words, Dasein and so human beings as such cannot but be open: The two interpretative paths that we have just walked are not necessarily in conflict: Dasein stands out in two senses, each of which corresponds to one of the two dimensions of our proposed interpretation. Second, Dasein stands out in an openness to and an opening of Being see e. As we have seen, it is an essential characteristic of Dasein that, in its ordinary ways of engaging with other entities, it operates with a preontological understanding of Being, that is, with a distorted or buried grasp of the a priori conditions that, by underpinning the taking-as structure, make possible particular modes of Being. Heidegger puts it like this: This resistance towards any unpalatable anti-realism is an issue to which

we shall return. But what sort of philosophical method is appropriate for the ensuing examination? In the Heideggerian framework, however, phenomenology is not to be understood as it sometimes is as the study of how things merely appear in experience. Presupposed by ordinary experience, these structures must in some sense be present with that experience, but they are not simply available to be read off from its surface, hence the need for disciplined and careful phenomenological analysis to reveal them as they are. So far so good. But, in a departure from the established Husserlian position, one that demonstrates the influence of Dilthey, Heidegger claims that phenomenology is not just transcendental, it is hermeneutic for discussion, see e. For Heidegger, this hermeneutic structure is not a limitation on understanding, but a precondition of it, and philosophical understanding conceived as fundamental ontology is no exception. Thus Being and Time itself has a spiral structure in which a sequence of reinterpretations produces an ever more illuminating comprehension of Being. As Heidegger puts it later in the text: What is decisive is not to get out of the circle but to come into it the right way†In the circle is hidden a positive possibility of the most primordial kind of knowing. To be sure, we genuinely take hold of this possibility only when, in our interpretation, we have understood that our first, last and constant task is never to allow our fore-having, fore-sight and fore-conception to be presented to us by fancies and popular conceptions, but rather to make the scientific theme secure by working out these fore-structures in terms of the things themselves. Being and Time And this is a tension that, it seems fair to say, is never fully resolved within the pages of Being and Time. The best we can do is note that, by the end of the text, the transcendental has itself become historically embedded. More on that below. Heidegger argues that we ordinarily encounter entities as what he calls equipment, that is, as being for certain sorts of tasks cooking, writing, hair-care, and so on. Indeed we achieve our most primordial closest relationship with equipment not by looking at the entity in question, or by some detached intellectual or theoretical study of it, but rather by skillfully manipulating it in a hitch-free manner. Entities so encountered have their own distinctive kind of Being that Heidegger famously calls readiness-to-hand. The less we just stare at the hammer-thing, and the more we seize hold of it and use it, the more primordial does our relationship to it become, and the more unveiledly is it encountered as that which it isâ€"as equipment. While engaged in hitch-free skilled activity, Dasein has no conscious experience of the items of equipment in use as independent objects i. Thus, while engaged in trouble-free hammering, the skilled carpenter has no conscious recognition of the hammer, the nails, or the work-bench, in the way that one would if one simply stood back and thought about them. Tools-in-use become phenomenologically transparent. The carpenter becomes absorbed in his activity in such a way that he has no awareness of himself as a subject over and against a world of objects. Phenomenologically speaking, then, there are no subjects and no objects; there is only the experience of the ongoing task e. Heidegger, then, denies that the categories of subject and object characterize our most basic way of encountering entities. He maintains, however, that they apply to a derivative kind of encounter. When Dasein engages in, for example, the practices of natural science, when sensing takes place purely in the service of reflective or philosophical contemplation, or when philosophers claim to have identified certain context-free metaphysical building blocks of the universe e. With this phenomenological transformation in the mode of Being of entities comes a corresponding transformation in the mode of Being of Dasein.

Chapter 2 : Confirmation (Stanford Encyclopedia of Philosophy)

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It must be noted that all the Ackermann function indeed, a many-to-one relation values do not follow a recursive single sequence â€" that is, they cannot be enumerated such that the later values are obtained only from earlier values in the sequence. Moreover, the abstract algebraic commutative ring of integers or field of rational or real numbers has only addition and multiplication as well as their respective inverse operations initially defined. Exponentiation that is, iterated multiplication is also well-defined over these number systems but tetration see Wikipedia article or non-standard iterated exponentiation the exponentiation is done at the deepest level first â€" that is, right associative operation is not well-defined it violates the laws of exponents for these standard number systems â€" that is, its operation is not properly derived from addition and multiplication. The Ackermann function is a function, if you define a function like every other mathematician to be a set of pairs. It has a procedure for computing it which provably always halts, which is enough to prove that the function exists and is unique. The fact that you can expand it in terms of its own values in ways other than the recursive definition is true but irrelevent. Haskell yields a more concise definition: The Scheme example seems a direct copy of the pseudocode except that it swaps the names of the two arguments and again minimizes the need for keywords. This is not a Perl golf competition - do these examples really contribute to the article at all? If you can understand the wikipseudocode, you would be able to understand the haskell notation of the function. I would say it were even easier to understand then the wiki one. I think you should keep the Scheme version out though, whereas it is easy to follow, it is more crytic than the original. If necessary, the partially iterative pseudocode can be removed also. IIRC from class 20 years ago Bubba73 talk , As the article explains, the little-known, independently-discovered Sudan function slightly predates it at least if you trust my source. Other such functions were published before that but never proven to be non-primitive-recursive until later. Anyone with access to the original paper by Sudan can write it though. Ackermann - or Budan or? Fri, 12 Sep Can someone assess who originated the so-called "Ackermann fn"? It appears it may not be Ackermann. Cristian Calude has written a number of papers on the history of the Ackermann and Sudan functions, e. According to MR 82k: This sentence is one of at least seven comparisons to the size, in number of elementary particles, of the physical universe. I realize the size of the universe can be used as a bound on what is computable, based on memory requirements, by any "real", physical computer, or as a bound on what is expressible in some particular formal language. But beyond that, is the size of the universe just for analogy, to express how impressive the rate of growth of the function is, or does it actually have some bearing in mathematics? On a related note, what is meant by "conceivable" in the above sentence? Formally, is the range of a n actually bounded above by 5? I would suggest changing "for any conceivable input size" to "for any input size that is scribable in decimal notation. It would seem that if you have a smart compiler, that does save the intermediate values, those memory requirements also get pretty large. Looks like a space-time tradeoff to me. It would be interesting to see any papers on this, if anyone is aware of them. That info should be included in the article. It is a three variable function which maps the common addition, multiplication, exponentiation, tetration, It, of course, has the following two whole number input parameters that R. This would make it use Polish notation, if the parameters were written and used from the left to right. Is it better to link to the wikipedia article if we have one? See Large countable ordinals Fundamental sequences for the Veblen hierarchy. The second argument and the value are still limited to natural numbers. However, I think but have not yet proved that by using this extention to ordinals the Ackermann function can surpass the Conway chained arrow notation as a means of naming large natural numbers. It might be entertaining, but it is not appropriate encyclopedic information. Wikipedia is not a math s textbook. Some

examples of the use of physical quantities when talking about related functions. An Introduction compares the Ackermann Function to the number of electrons in the universe. Other books that use similar comparisons: But there is one point we need to be careful of: A lot of times this sort of thing will be sloppily presented as a comparison with "the universe". What they really mean is the observable universe. Our current table instead uses A 5,1 three times, which I think is distracting because it breaks the pattern in that is otherwise clear in row 6. Another possibility is using A 5, A 6, 0 as the result for A 6, 1. Do you guys have a preference? In other words, the only way of writing the values of the Ackermann function is to use the Ackermann function itself, or functions like it. I think the highest value that should be written is 2.

Chapter 3 : Systemic lupus erythematosus biomarkers: the challenging quest | Rheumatology | Oxford Aca

F.A. Farrelly, E. Flamini, A. Petri, L. Pitolli and G. Pontuale, Procs. of ASI (Italian Space Agency), Workshop Nazionale su "La scienza e la tecnologia sulla Stazione Spaziale Internazionale (ISS)" Torino, maggio

He translated the Bible into Arabic and wrote numerous works, both in Hebrew and Arabic, in the fields of philology, exegesis, Talmudics, polemics, Jewish history, and philosophy. Its purpose is to prove the compatibility of the principles of Judaism with reason and to interpret them in such a way that their rationality be evident The first nine sections establish philosophically the ten fundamental articles of faith, and the tenth deals with ethics. Philosophically, Saadia was influenced by the teachings of the Mutazilia. Sound, an Indian metaphysical concept; word, particularly the cosmic or divine word see vac, testimony, a valid source of knowledge in some philosophic systems. The view of Sabellius who taught in the first half of the third century the doctrine that there is one God but three successive modes or manifestations of God: The view approximated the later orthodox Trinitarian conception see Trinitarianism but was too harsh to be maintained. Further clarification was needed Sabellianism has been called by several names, Modalism, Modalistic Monarchianism and Patripassianism Father suffering. Lat sacerdotalis pertaining to a priest A religious system revolving about a priestly order. The term, when employed in a derogatory sense, means the unwholesome preference for ecclesiastical and sacramental observances in contrast to the more valid personal and moral values. Both a party and a belief so named after the Zadokites, sons of Zadok, the family and temple hierarchy, advocates of the written Torah teaching in Judaism, the party and attitude opposite to the Pharisees and scribes, who prized oral and developing thought as well as the Torah. In general, Sadducee-ism, holding the Law Pentateuch to be explicit and its language straight-forward, rejected the Messianic doctrine as regards the House of David, but not as regards a priestly source, and also that of resurrection of the body, but not that of the soul. On the whole, however, Jesus and Paul both proved to be the enemies of Pharisee-ism and in effect sided with the Sadduccees against traditional law. He supported the French Revolution. He advocated what he termed a new science of society to do away with inequalities in the distribution of property, power and happiness. Love for the poor and the lowly was basic for the reform he urged. He greatly influenced Comte and Positivism. Oeuvres de Saint-Simon, 46 vols. Strength, might, of feminine gender, the word designates in Tantric see Tantra literature the female generative power of energy in the universe, worshipped by the religious as the wife of some deity or other, e. The final stage in the practice of Yoga q. Generality, universality, the universal in contrast to the particular. The universal is understood in the realist manner by the Nyaya- Vaisesika to be eternal and distinct from, yet inherent in the particular, in the nominalist manner, by the Buddhists, to have no intrinsic existence; in the manner of universalia in re by the Jainas and Advaita Vedanta. One of the "persistent problems" of philosophy which goes back at least to Parmenides and Heraclitus q. In its most general form it raises the question: Is reality explicable in terms of one principle, ultimately the same in all things monism, or is reality ultimately heterogeneous, requiring a plurality of first principles pluralism? Plato really developed the problem in the Sophist, Parmenides and Timaeus by suggesting that both sameness and otherness are required for a complete explanation of things. A wise man, philosopher. It is the object of practically every Indian philosophy to find a way to escape from samsara and attain moksa q. Also the effects of karma q. Applied to the interpretation of history, this theory means that the Hsia dynasty B. Tung Chung-shu, B. The three systems, doctrines, philosophies, or religions of Confucianism, Buddhism, and Taoism. A sanction is anything which serves to move and, in this sense, to oblige a man to observe or to refrain from a given mode of conduct, any source of motivation, and hence, on a hedonistic theory, any source of pleasure or pain. Gay and Bentham distinguished four such sanctions: Mill labelled these external, and added an internal sanction, viz. The Three Standards, i. One of the greatest of Indian philosophers, defender of Brahamism, who died about AD. Perhaps the oldest of the major systems of Indian philosophy q. Originally not theistic, it is realistic in epistemology, dualistic in metaphysics, assuming two

moving ultimates, spirit purusa, q. Prakrti possesses the three qualities or principles of sattva, rajas, tamas see these and guna, first in equipoise. When this is disturbed, the world in its multifariousness evolves in conjunction with purusa which becomes the plurality of selves in the process. The union samyoga of spirit and matter is necessary for world evolution, the inactivity of the former needing the verve of the latter, and the non-intelligence of that needing the guidance of conscious purusa. Successively, prakrti produces mahat or buddhi, ahamkara, manas, the ten indrivas, five tanmatras and five mahabhutas all of which see. The earliest extant text of the Sankhya by Isvarakrsna; a famous commentary on it is that of Gaudeapada. The three laws in reasoning and argumentation, namely, that "there must be a basis or foundation" which can be "found in a study of the experiences of the wisest men of the past," that "there must be a general survey" by "examining its compatibility with the facts of the actual experience of the people," and that "there must be practical application" by "putting it into law and governmental policies, and see whether or not it is conducive to the welfare of the state and of the people. For Santayana, one of the most eminent of contemporary naturalists, consciousness, instead of distorting the nature of Reality immediately reveals it. So revealed, Reality proclaims itself an infinity of essences Platonic Ideas subsisting in and by themselves, some of which are entertained by minds, and some of which are also enacted in and by a non-mental substratum, substance or matter, which adds concrete existence to their subsistence. The presence of this substratum, though incapable of rational proof, is assumed in action as a matter of animal faith. Furthermore, without it a selective principle, the concrete enactment of some essences but not of others is inexplicable. Matter, among other things, is external to and independent of consciousness, spatially extended, unequally distributed corporeal, subject to locomotion and perhaps to intrinsic alteration in its parts, and capable of becoming conscious. Its selective and progressive enactment of essences is not teleological or intelligent, but is actuated by efficient causation and predetermined by antecedent situations. In organic bodies matter may become conscious. Mind, being an activity of the body, and unsubstantial, is not causally effective, but simply entertains and contemplates essences both enacted and unenacted. Its registration of the natural functions and drives of the body of which it is the aura, is desire, which gives values like truth, goodness, and beauty to the essences entertained. The desire to know, satisfied by intelligibility, creates science, which is investigation of the world of enacted essences, where alone the explanation of things is to be found. The natural desire to experience social harmony and to contemplate beauty creates morality, art, poetry and religion, which entertain in imagination and seek to make concrete by action, combinations of essences, often unenacted and purely ideal. These desires and drives, however, tend to stray beyond their proper provinces and to become intermingled and confused in attempts to identify truth, goodness, and beauty, to turn justifications into explanations, to regard subsistent ideals as concretely existent facts, and to distort facts into accordance with desired ideals. It is the business of reason and philosophy to clear up this confusion by distinguishing human drives and interests from one another, indicating to each its proper province and value, and confining each to the field in which it is valid and in which its appropriate satisfaction may be found. By so doing, they dispel the suspicion and antagonism, with which the scientist, the moralist, the artist, and the theologian are wont to view one another, and enable a mind at harmony with itself to contemplate a world in which subsistent and the existent form a harmonious whole. Sense and Beauty, ; Interpret. A work by Madhvavacarya, professing to be a collection sangraha of all sarva philosophic views darsana or schools. It includes systems which acknowledge and others which reject Vedic s. Sarvam khalv idam brahma: The doctrine vada of Hinayana Buddhism according to which "all is" sarvam asti, or all is real, that which was, currently is, and will be but now is, potentially. Being, a metaphysical concept akin to Eleatic thinking, which a school of thinkers regards as fundamental, as in Chandogya Upanishad 6. Art holding vice or folly up to ridicule, or lampooning individuals through the use of irony or sarcasm. Also one of the three gunas q. Actual, real, true, valid, truth, reality, the real. A Buddhist school of representationalism, same as Bahyanumeya-vada q. Scepticism may be treated as such attitudes, beliefs, etc. Confusion of cynicism with other conceptions of scepticism may result in great misunderstanding and harm. At the beginning of the 14th century, Duns Scotus adopted a position which is not formally

sceptical, though his critical attitude to earlier scholasticism may contain the germs of the scepticism of his century. Before, Henry of Harclay noticed that, since the two terms of efficient causal connection are mutually distinct and absolute things, God, by his omnipotent will, can cause anything which naturally naturaliter is caused by a finite agent. He inferred from this that neither the present nor past existence of a finite external agent is necessarily involved in cognition Pelstex p. Later Petrus Aureoli and Ockham made the sime observation Michalski, p. Without this assumption, observed sequences might well be the occasion of direct divine causal action rather than evidence of natural causation. It is possible that these sceptical views were suggested by reading the arguments of certain Moslem theologians Al Gazali and the Mutakallimun, as well as by a consideration of miracles. The most influential sceptical author of the fourteenth century was Nicholas of Autrecourt fl. Influenced perhaps by the Scotist conception of logical demonstration, Nicholas held that the law of noncontradiction is the ultimate and sole source of certainty. In logical inference, certainty is guaranteed because the consequent is identical with part or all of the antecedent. No logical connection can be established, therefore, between the existence or non-existence of one thing and the existence or non-existence of another and different thing. The inference from cause to effect or conversely is thus not a matter of certainty. The existence of substance, spiritual or physical, is neither known nor probable. We are unable to infer the existence of intellect or will from acts of intellection or volition, and sensible experience provides no evidence of external substances. The only certitudes properly so-called are those of immediate experience and those of principles known ex terminis together with conclusions immediately dependent on them. This thoroughgoing scepticism appears to have had considerable influence in its time, for we find many philosophers expressing, expounding, or criticizing it. These sceptical views were usually accompanied by a kind of probabilism. The condemnation of Nicholas in put a damper on the sceptical movement, and there is probably no continuity from these thinkers to the French sceptics of the 16th century. Despite this lack of direct influence, the sceptical arguments of 14th century thinkers bear marked resemblances to those employed by the French Occasionalists, Berkeley and Hume. Scheler, Max was originally a disciple of Rudolf Eucken, but joined early -- at the University of Munich -- the Husserl circle of phenomenologists, of which school he became one of the leading exponents. Moving from Kantianism and Eucken-personalism into phenomenology, he later espoused successively positions which may be called a synthesis between phenomenology and Catholic philosophy, sociological dynamism, and ideo-realistic humanism. He was the psychologist, ethicist, and religious and social philosopher of the phenomenological movement. His most important works include: Schelling, Friedrich Wilhelm Joseph von Founder of the philosophy of identity which holds that subject and object coincide in the Absolute, a state to be realized in intellectual intuition. Freedom and necessity are different refractions of the same reality. Supplementing science -- which deals with matter as extinguished spirit and endeavors to rise from nature to intelligence -- philosophy investigates the development of spirit, theoretically practically, and artistically, converts the subjective into the objective, and shows how the world soul or living principle animates the whole. It is pantheistic and aesthetic in that it allows the world process to create with free necessity unconsciously at first in the manner of an artist. Art is perfect union of freedom and necessity, beauty reflects the infinite in the finite. History is the progressive revelation of the Absolute. The ultimate thinking of Schelling headed toward mysticism in which man, his personality expanded into the infinite, becomes absorbed into the absolute self, free from necessity, contingency, consciousness, and personality.

Chapter 4 : - NLM Catalog Result

[et al.] -- Contributions of synthetic biology to the field of the origin of life / Pier Luigi Luisi -- Preparation of lipid vesicles / M. Cataldo, K. Cosentino, and A. Ramundo-Orlando -- Discrete methods for the analysis of biological networks and pathways / Ron Y. Pinter -- Implicit knowledge discovery / Francis A. Farrelly and Alberto Petri.

Individual learning and organizational routine. In Organizational Learning, M. A garbage can model of organizational choice. Administrative Sciences Quarterly 17 1: A Hybrid Architecture for Metacognitive Learning. Blaming men, not machines. Studies in Artificial Evolution. University of California, Los Angeles. Models of reading aloud: Dual-route and parallel-distributed-processing approaches. Decomposed versus holistic estimates of effort required for software writing tasks. Judgment and Decision Making: An Interdisciplinary Reader second edition. Regret and responsibility on the evaluation of decision outcomes. Organizational Behavior and Human Decision Processes Human Nature and Social Order. Single-peaked functions and the theory of preference. Seven minutes to death. Activation, attention and short-term memory. Memory and Cognition An approach to evolving novel organizational forms. Computational and Mathematical Organization Theory 26 1: Command and Control of Theater Forces: A Behavioral Theory of the Firm. Modeling Human and Organizational Behavior: Application to Military Simulations. The National Academies Press. Using interruptions to identify task prioritization in part air carrier operations. The Ohio State University. Belief, change, and accumulated information. In Mathematical Models of Attitude Change: Behavioral decision making and judgment. In Handbook of Social Psychology, S. The false consensus effect and overconfidence: Flaws in judgment or flaws in how we study judgment? Quantitative modeling of complex computational task environments. A framework for modeling task environment. Dissertation, University of Massachusetts. A framework for environment centered analysis and design of coordination mechanisms. John Wiley and Sons. Military Command Decision making Expertise. Defense Advanced Research Project Agency. The Social Impact of the Telephone. New Developments in Psychological Choice Modeling. In Multiple Task Performance, D. Taylor and Francis Ltd. Page Share Cite Suggested Citation: The operator-model architecture and its psychological framework. Massachusetts Institute of Technology. Research, Development, Training, and Evaluation: Dynamic stochastic models for decision making under time pressure. Journal of Mathematical Psychology Explanation-based learning and reinforcement learning: Machine Learning 28 2:??. Society of Photo-optical Instrumentation Engineers. Can SA be defined? Papers and Annotated Bibliography U, M. The American Journal of Psychology Little, Brown and Company. The entropy reduction engine: Integrating planning, scheduling, and control. How good is this Navy, anyway? News and World Report July Coordination of Distributed Problem Solvers. Coordination as distributed search in a hierarchical behavior space. Emotions and their computation: Cognition and Emotion 3: Investment Banks at Work. Harvard Business School Press. Logic, reasoning and a programming language for simulating economic and business processes with artificially intelligent agents. Special Issue on Emotion, in Japanese, to appear. A Methodology for the Measurement of Situation Awareness. Human Factors and Ergonomics Society. International Journal of Aviation Psychology 3: Human Factors 37 1: Oral and Written Communication: The Road to Excellence. Toward a General Theory of Expertise: The role of deliberate practice in the acquisition of expert performance. Integrating knowledge to resolve uncertainty. Toward a statistical theory of learning. Technical Report AD-A Connectionist models and their properties. A Theory of social comparison processes. A battlefield reasoning system. A new approach to the application of theorem proving to problem solving. Sensitizing synthetic forces to suppression on the virtual battlefield. Consensus, diversity, and learning in organizations. Organizational Science 5 3: The effect of outcome knowledge on judgment under uncertainty. Journal of Experimental Psychology: Human Perception and Performance 1: In Judgment Under Uncertainty: Heuristics and Biases, D. Remembered probabilities of once-future things. Organizational Behavior and Human Performance A consideration of beliefs, attitudes, and their

relationships. In Current Studies in Social Psychology: Current Studies in Social Psychology, I.

Chapter 5 : USA1 - Method and system for dynamic application management - Google Patents

This paper focuses on interactive Knowledge Discovery pro-cesses in the context of understanding an activity from behavioural data. Data mining provides patterns experts have to interpret and.

Family edit Peter Caxaro was born of a noble Mdina family in Malta. We might suppose, however, that he was born around the beginning of the 15th century, perhaps around It might be possible that the family was of Jewish descent which had been forced to convert to the Catholic faith. Later, he went to Palermo, Sicily, to pursue them further. At the time, Palermo was a flourishing city imbued with the spirit of Renaissance humanism. There, Caxaro completed his studies and became a notary in A couple of months after his graduation, he was appointed judge at the courts of Gozo for the years In, he also sat as judge in the courts of Malta, and the similarly in He was judge at the civil courts in , $\hat{a} \in \mathbb{C}$ and $\hat{a} \in \mathbb{C}$, and judge at the ecclesiastical courts in and Caxaro was also jurat at the Town Council of Mdina in , $\hat{a} \in$ ", $\hat{a} \in$ ", $\hat{a} \in$ ", $\hat{a} \in$ " and He was a notary or secretary to the same council in and He possessed considerable property at the northern side of Malta, and was the owner of six slaves. Friendship with Dominicans[edit] During all this time, Caxaro was on very good terms with the Dominican friars. The Dominicans had originally arrived in Malta around, and quickly forged good friendships amongst the literary population and professional people, including academics. Towards the end of the 15th century, the Dominicans could boast of erudite friars amongst their fold, such as Peter Xara, Peter Zurki, Dominic Bartolo who was also Pro-Inquisitor for some cases of the Inquisition in Malta and Bartolomeus Pace. Caxaro was certainly a good friend of some of these men, both for intellectual as well as personal reasons. The fact that he designated the Dominicans as his general inheritors, or residuary legatees, in his will is proof enough of this. Marriage attempt[edit] Around, Caxaro aspired to marrying a widow, Franca de Biglera. Despite the fact that Caxaro did all he could to win Franca over, and also obtained the official blessing of the bishop of Malta, the marriage did not take place. To the great consternation of Caxaro, Franca changed her mind. Caxaro remained a bachelor to the end of his days. Excommunicated[edit] At the Town Council of Mdina Caxaro had three particular themes which he seemed to come to life about: In, Caxaro took an active and bold part in an issue which involved the bishop of Malta, who was suspected of corruption. Caxaro was vehement against such corruption, and vigorous in his demand for an immediate remedy. In June, as an act of retaliation, the bishop excommunicated him, an action which was considered immensely serious in those days. Nevertheless, Caxaro was unyielding in his opposition and demands. Consequently, the bishop interdicted him. However, Caxaro was nonetheless undaunted. Accordingly, the excommunication and the interdict were removed. Death[edit] On August 12, , Caxaro drew up his will, and died a few days later. The precise date of his death is still not known with any certainty. All his possession went to the Dominican friars. It is not known where he was initially buried. However, later, as he had it willed, his remains were laid to rest in one of the newly built chapels of the church of St. Dominic at Rabat, Malta. Brandan himself in its original Maltese version. The discovery was encountered with enthusiasm within scholarship circles since it had eventually given Maltese literature its greatest boost for a very long time. The discoverers themselves, both reliable historical researchers, [8] carefully examined the document and found that it could not reveal any suspicious feature. Up till, modern scholarly references to Peter Caxaro had been few. The first known to have referred to him was the Dominican Paul Galea in his history of the Dominicans at Rabat, Malta, published in Brandan - a member of the Society of True Christians - indicated its author as a "philosopher, poet and orator". Brandan transcribed it as faithfully as possible as he recalled it. Lately, a few proposals have been made which held that the said composition, in part [17] or as a whole, [18] does not have Peter Caxaro as its author. It has been said that the poem is none other than Rev. Thus the author hastily concluded that the qualifications attributed to Caxaro by Rev. He seems to qualify [21] as a phonetic master, as well as one having control of classical rhetoric techniques. He has tact in expressing his veiled poetic thought in striking and tempting allusions. In other words, Caxaro is a forceful writer, [22] possessing clarity of thought, and is

confident in handling of style. The first known date regarding Caxaro is April 1, , when he set for the examination to be given the warrant of public notary of Malta and Gozo by the competent authorities in Palermo, Sicily. This means that Caxaro had spent some time in Palermo, a city then imbued with humanism. Alternatively or concurrently, at one time or another Caxaro acted as judge in the civil courts of Gozo [31] and of Malta, [32] and in the ecclesiastical cours. Caxaro had willed that he be buried in the Dominican newly built church at Rabat, as eventually happened. His immobile property was considerable, [43] though not exuberant. It is known that he had in his service at least six slaves. The first, occurring either in or, [45] concerns his proposed marriage to Francha di Biglera. The most recent significant addition to the personal data and profile of Peter Caxaro was made by Frans Sammut in Much work has yet to be accomplished in this difficult field. We only possess isolated parts of his contributions, the most complete being the Cantilena, which, in itself, comes down to us through an imperfect, indirect source. Furthermore, the reasons for which Brandan recalled the work, and even the manner in which he did so, is unto this day a baffling uncertainty. The cheerfulness felt by Brandan apparently seems to be doubly caused, namely by both the memory of the composition and the memory of his ancestor with a necessary relationship of one to the other. Wettinger and Fsadni had suggested [52] that it was the consolation which Brandan saw in the content of the composition that prompted him to leave us a memory of it, writing it down in one of the registers of his acts. But this is a question which must still be open to discussion. He specifically refers here to the four lines of the refrain vv. Brincat, guided by his erudition as by common sense, concludes that the quatrain which stands on its own between the two stanzas, of six verses and ten verses each respectively, is erroneously transcribed by Brandan. The sentences, however interesting they may be, only give us an inkling into the equilibrate soberness of Caxaro. The same may be said of the municipal acts. At most of these, he had a minor say; [59] at other times, his share is more substantial. However, being a trustworthy notary in possession of a precise vocabulary to which the rest of the prologue, at least, is witness, Rev. Brandan is to be understood in a strict sense. The hope of the discovery of corroborative material in this regard must remain enkindled. Innumerable cases of the sort may be found to exist, including philosophers of a gigantic stature, such as the Miletians, or even Aristotle himself. We have similar cases with philosophers of outstanding relevance, such as the Eleatics, including Parmenides himself, the father of philosophy. We do not have to do with a then out-going poetic custom in an age where prose took the precedence, as in the Greek naturalistic philosophers of the 5th century BCE. We are in the context of 15th-century Medieval philosophy, highly susceptible to classical literature, both Greek and Roman, but particularly to Plato and Aristotle. Here, more than anything else, the poetic form is a technique, an expressive and cognitive distinction. Some scholars today, especially those brought up in a scholastic tradition, would like to qualify a philosophic work from its systematic nature. Such a definite distinctness would have philosophers like Aristotle, Avicenna, Albertus Magnus, Aquinas, and the like, fitting like drawers. On the other hand, however, it would unwittingly exclude, if none other, Plato himself, the archetype philosopher of all time, who, unlike the scientist Aristotle, is an artist prior to being a philosopher. The Corpus Platonicum stands as evident testimony. Thus Caxaro is part of a tradition which may characteristically and properly be called platonic. The accent here would fall less on unsystemization, and more on narration, or better, on the myth-type philosophy in its technical connotation. From the formal, essential aspect, we are in the line of Plato, St. Augustine and the Medieval neo-Platonists, especially those with a humanistic formation in the early Renaissance period. This was later continued by people like Descartes, Pascal, Rousseau, Nietzsche, and the like. Though the will is duly valued, the intrinsic mental capabilities of man are held to be necessary, prior to the senses, in discovering the true object of knowledge, that being which is different and superior to mere sense data. Humanist Catalonia [edit] Catalonia , together with Aragon , became familiar with humanism before Castille. Fernandez travelled to the East and returned with many Greek manuscripts. He later established himself as a translator, compiler and commentator of classical texts, therefore giving rise to a literary culture concerned with human interests. They were additionally highly instrumental in animating the cultural centres of Barcelona and Valencia with the spirit of humanism. Here, as elsewhere, humanism was not

restricted to mere cultural circles, but had become the philosophy of the people. Caxaro, apart from his father, had other members of his family, together with many of his townfolk, [67] taking part in this same commerce of goods and ideas. From the first half of the 15th century onwards, Palermo went through an enormous and impressive economic, demographic and urbanistic development, [69] manifesting a substantial cultural facelift. As in the case of Catalonia, the spirit of humanism was imported to Sicily from Northern Italy where large numbers of Palemitans went to study. These were centres where the classical texts were circulated mainly in manuscript form. Moreover, while the use of the vulgar tongues became established as a practised norm, [76] the so-called cultura del decoro of the humanists became, more than restricted to cultural circles, a quality of life. The whole city was caught in a rediscovered renovation, manifesting a strong concern for the quality of life. The prevailing humanism brought to the fore a movement of the spirit, each time aesthetic, philosophic, scientific and religious, [79] sharpening the notion of beauty, and brightening the relationship to nature and naturalism. The heart of the Mediaeval humanists, as distinct from that of the 14th century Mediaeval masters, and from the exponents of the 16th century Renaissance , was the retrieval and imitation of the beauty of ancient letters. This had nothing of any anti-Christian sentiment but definitely emphasized naturalism enormously.

Chapter 6 : Pietru Caxaro - Wikipedia

Tool condition monitoring (TCM) is an important aspect of condition based maintenance (CBM) in all manufacturing processes. Recent work on TCM has generated significant successes for a variety of cutting operations.

E, in press La Nave and A. E 83, Petri and Marco Girasole Eds. Nova Science Publishers Inc. Nova Science Publisher Inc. Loreto, Philosophical Magazine 88, C 17, B 87 Pietronero, Physica A PDF file "Senato, tutto da rifare" A. Pontuale, Le Scienze, Settembre, p. PDF file "Brownian forces in shared granular matter" A. PDF file "Crystal vs Glass formation in lattice models with many coexisting states ordered states" M. PDF file "Glassy states in lattice models with many coexisting crystalline phases" M. PDF file "In-situ acoustic-based analysis system for physical and chemical properties of the lower Martian atmosphere" F. Pontuale, Planetary and Space Science 52, Seventh Granada Lectures, P. Farrelly a, A. Petri a, L. Pitolli a and G. PDF file "A statistical analysis of acoustic emission signals for tool condition monitoring" G. Pitolli, ARLO 41, PDF file "A microscopic model for granular compaction with friction" C. E 66 3, Phys A 35 26, PDF file "Critical fluctuations in the breakdown of disordered lattices" A. E 65 2, B 82 5, B 82 4, PDF file "Granular gases: Marini Bettolo Marconi, A. Vulpiani, Physica A, PDF file "Slow relaxation in a diffusional model for granular compaction" M. Balkema Rotterdam, p. PDF file "Criticality in models for fracture in disordered media" G. Petri, Physica A, PDF file "Numerically efficient computation of eigensolution spectrum in one-dimensional heterostructures" Francis A. Farrelly and Alberto Petri, Int. C 97, PDF file "Asymptotic moment growth for products of correlated random matrices", A. J de Oliveira, Physica A, A 31 L PDF file "Acoustic emission and microcrack correlation", A. Mag B 77, Shkerdin, in New perspectives on problems in classical and quantum physics: P Delsanto and A. Marini Bettolo Marconi and A. Mag B 77 E 55, PDF file "Resistance statistics in one-dimensional systems with correlated disorder", M. B 56, Non conserved Order Parameter domain growth", U. A 30, PDF file "Density of states and localization lengths in one-dimensional linear chains", M. B 11, PDF file "Long range correlation properties of aftershock relaxation signals", A. Petri, in Fractal Geometry and Analysis: O Peitgen and R. World Scientific Singapore, p. Rev E 53,

Chapter 7 : Dictionary of Philosophy

In this paper the problem of discovering a Petri net (PN) from sampled events sequences representing the execution of industrial or business processes is addressed A method for building a 1.

Confirmation by instances In a seminal essay on induction, Jean Nicod offered the following important remark: Consider the formula or the law: How can a particular proposition, or more briefly, a fact affect its probability? See Sprenger a, â€" Following Hempel, we will take universally quantified material conditionals as canonical logical representations of relevant hypotheses. More precisely, Hempelian confirmation can be defined as follows: In each of clauses i and ii, Hempelian confirmation disconfirmation, respectively is a generalization of direct Hempelian confirmation disconfirmation. So the latter is disconfirmed by the evidence in this case. The ravens paradox Hempel, Consider the following statements: Now consider the following statements: Then one could restrict confirmation theory accordingly, i. Yet this point turns out be very difficult to pursue coherently and it has not borne much fruit in this discussion. The water example comes from Howson, 31â€" See Schwartz, ff. Yet the Hempelian notion of confirmation turns out to be very restrictive, too, on other accounts. Throughout modern physics, significant relations of confirmation and disconfirmation were taken to obtain between statements like these. In such circumstances, there can be nothing but Hempel-neutrality between evidence and hypothesis. To overcome the latter difficulty, Clark Glymour a embedded a refined version of Hempelian confirmation by instances in his analysis of scientific reasoning. This important theoretical move turns confirmation into a three-place relation concerning the evidence, the target hypothesis, and a conjunction of auxiliaries. Originally, Glymour presented his sophisticated approach in stark contrast with the competing traditional neo-Hempelian view of so-called hypothetico-deductivism HD. In the next section, we will discuss the HD framework for confirmation and also compare it with Hempelian confirmation. It will thus be convenient to have a suitable extended definition of the latter, following the remarks above. Here is one that serves our purposes: Note that clause ii above represents HD-disconfirmation as plain logical inconsistency of the target hypothesis with the data given the auxiliaries see Hempel, HD-confirmation and Hempelian confirmation convey different intuitions see Huber a for an original analysis. They are, in fact, distinct and strictly incompatible notions. This will be effectively illustrated by the consideration of the following conditions. As for CC, he took it as a plain definitional truth, HD-confirmation, on the contrary, violates all of them. Let us briefly discuss each one in turn. Logical entailment is thus retained as an instance of Hempelian confirmation in a fairly straightforward way. HD-confirmation, on the contrary, does not fulfil EC. Here is one odd example see Sprenger a, So the observation of a black swan turns out to be HD-neutral for the hypothesis that black swans exist! The same example shows how HD-confirmation violates CC, too. The violation of EC and CC by HD-confirmation is arguably a reason for concern, for those conditions seem highly plausible. The special consequence condition SCC, on the other hand, deserves separate and careful consideration. As we will see later on, SCC is a strong constraint, and far from sacrosanct. For now, let us point out one major philosophical motivation in its favor. SCC has often been invoked as a means to ensure the fulfilment of the following condition see, e. Notably, this does not hold for HD-confirmation. The troubling conclusion is that the observation that a swan is white or that a million of them are, for that matters does not HD-confirm the prediction that a further swan will be found to be white. The derivation of the paradox, as presented above, is thus blocked. Here is how it goes. One of the most frustrating is surely the following see Osherson, Smith, and Shafir, , for further specific problems. The irrelevant conjunction paradox. HD-confirmation, on the contrary, can not draw this distinction: In these proposals, the spread of HD-confirmation upon frivolous conjunctions can be blocked at the expense of some additional logical machinery see Gemes, ; Schurz, Finally, it should be noted that HD-confirmation offers no substantial relief from the blite paradox. So HD-confirmation, too, sanctions the existence of confirmation relations that seem intuitively unsound indeed, indefinitely many of them: So, all in all, HD-confirmation can

not tell black from blite any more than Hempel-confirmation can. Many have suggested a closer look at real-world inferential practices in the sciences as a more appropriate benchmark for assessment. For one thing, the very idea of hypothetico-deductivism has often been said to stem from the origins of Western science. As reported by Simplicius of Cilicia sixth century A. As a matter of historical fact, mathematical astronomy has engaged in just this task for centuries: It is fair to say that, at its roots, the kind of challenges that the HD framework faces with scientific reasoning is not so different from the main puzzles that arise from philosophical considerations of a more formal kind. Still, the two areas turn out to be complementary in important ways. The following statement will serve as a useful starting point to extend the scope of our discussion. UT is an elementary logical fact that has been long recognized see, e. To appreciate how UT can spark any philosophical interest, one has to combine it with some insightful remarks first put forward by Pierre Duhem and then famously revived by Quine in a more radical style. Duhem he himself a supporter of the HD view pointed out that in mature sciences such as physics most hypotheses or theories of real interest can not be contradicted by any statement describing observable states of affairs. So, in effect, Duhem emphasized that, typically, scientific hypotheses or theories are logically consistent with any piece of checkable evidence. Unless, of course, the logical connection is underpinned by auxiliary hypotheses and assumptions suitably bridging the gap between the observational and non-observational vocabulary, as it were. Let us briefly consider a classical case, which Duhem himself thoroughly analyzed: Across the decades, wave theorists were able to deduce an impressive list of important empirical facts from their main hypothesis along with appropriate auxiliaries, diffraction phenomena being only one major example. In fact, it was quite clear that particle theorists, unlike their wave-theory opponents, were striving to remedy weaknesses rather than scoring successes see Worrall So the HD approach to confirmation has yielded a number of more articulated variants to meet the challenge of underdetermination. Following loosely Norton, we will now survey an instructive sample of them. The predictivist sets a high bar for confirmation. Her favorite examples typically include stunning episodes in which the existence of previously unknown objects, phenomena, or whole classes of them is anticipated: The predictivist solution to the underdetermination problem is fairly radical: Critics have objected that predictivism is in fact far too restrictive. There seem to be many cases in which already known phenomena clearly do provide support to a new hypothesis or theory. In addition to this problem with old evidence, HD predictivism also seems to lack a principled rationale. Why should it bear on the confirmation relationship among them? See Giere and Musgrave for classical discussions of these issues. Harker and Douglas and Magnus offer more recent views and rich lists of further references. The UN reaction to the underdetermination problem is more conservative than the temporal predictivist strategy. The UN view thus comes equipped with a rationale. Consider the touchstone example of Mercury again. According to Zahar, Einstein did not need to rely on the Mercury data to define theory and auxiliaries as to match observationally correct values for the perihelion precession also see Norton a; and Earman and Janssen for a very detailed, and more nuanced, account. For a more mundane illustration, so-called cross-validation techniques represent a routine application of the UN idea in statistical settings as pointed out by Schurz, 92; also see Forster, ff. According to some commentators, however, the UN criterion needs further elaboration see Hitchcock and Sober and Lipton, while others have criticized it as essentially wrong-headed see Howson and Mayo, ; also see Votsis The founding figure of eliminativism is Francis Bacon â€" Eliminativism is most credible when experimentation is at issue see, e. It is much less clear how firm a grip this approach can retain when inference takes place at higher levels of generality and theoretical commitment, where the hypothesis space is typically much too poorly ordered to fit routine error-statistical analyses. This basic idea has never lost its appealâ€"even up to recent times see, e. Moreover, in ordinary scientific problems such as curve fitting, formal criteria of model selection are applied where the paucity of parameters can be interpreted naturally as a key dimension of simplicity Forster and Sober Traditionally, two main problems have proven pressing, and frustrating, for the simplicity approach. First, how to provide a sufficiently coherent and illuminating explication of this multifaceted and elusive notion see Riesch ; and second, how to justify the role of

simplicity as a properly epistemic rather than merely pragmatic virtue see Kelly , By this move, the HD approach embeds the slogan of the so-called inference to the best explanation view: Historically, the main source for this connection between explanation and support is found in the work of Charles Sanders Peirce $\hat{a} \in$ " Quite unlike eliminativist approaches, explanationist analyses tend to focus on large-scale theories and relatively high-level kinds of evidence. Explanationist accounts are also distinctively well-equipped to address inference patterns from non-experimental sciences Cleland The problems faced by these approaches are similar to those affecting the simplicity view. Agreement is still lacking on the nature of scientific explanation see Woodward and it is not clear how far an explanationist variant of HD can go without a sound analysis of that notion. Moreover, some critics have wondered why the relationship of confirmation should be affected by an explanatory connection with the evidence per se see Salmon The above discussion does not display an exhaustive list nor are the listed options mutually exclusive, for that matter:

Chapter 8 : NYU Computer Science Department

Although the discovery learning group had more available explicit knowledge than the other groups, the similarity in performance during the test phases suggests that the discovery learning group did not use this knowledge to perform the balancing task.

Platform Migrator Author s: Currently, one of the major problems in software development and maintenance, specially in academia, is managing packages across time and systems. An application developed under a particular package manager using a certain set of packages does not always work reliably when ported to a different system or when abandoned for a period of time and picked up again with newer versions of the packages. In this report, we provide and describe Platform Migrator, a software that makes it easy to test applications across systems by identifying various packages in the base system, figuring out their corresponding equivalents in the new system and testing whether the software works as expected on the new system. Platform migrator can migrate software written and set up inside a conda environment to any Linux based system with conda or some other package manager. The philosophy of platform migrator is to identify a closure of the required dependencies for the software being migrated using the conda environment metadata and then use that closure to install the various dependencies on the target system. This documentation provides comprehensive details on how to use platform migrator and what it does internally to migrate software from one system to another. It also contains tutorials and case studies that can be replicated for better understanding of the process. Curved Boundaries Author s: In this report we investigate the solution of boundary value problems for elliptic partial differential equations on domains with corners. Previously, we observed that when, in the case of polygonal domains, the boundary value problems are formulated as boundary integral equations of classical potential theory, the solutions are representable by series of certain elementary functions. Here, we extend this observation to the general case of regions with boundaries consisting of analytic curves meeting at corners. We show that the solutions near the corners have the same leading terms as in the polygonal case, plus a series of corrections involving products of the leading terms with integer powers and powers of logarithms. Consider the goal of visiting every part of a room that is not blocked by obstacles. Doing so efficiently requires both sensors and planning. Our findings suggest a method of inexpensive optical range finding for robotic room traversal. Our room traversal algorithm relies upon the approximate distance from the robot to the nearest obstacle in degrees. We then choose the path with the furthest approximate distance. Since millimeter-precision is not required for our problem, we have opted to develop our own laser range finding solution, in lieu of using more common, but also expensive solutions like light detection and ranging LIDAR. Rather, our solution uses a laser that casts a visible dot on the target and a common camera an iPhone, for example. Based upon where in the camera frame the laser dot is detected, we may calculate an angle between our target and the laser aperture. Using this angle and the known distance between the camera eye and the laser aperture, we may solve all sides of a trigonometric model which provides the distance between the robot and the target. Dohrmann, Clark; Widlund, Olof Abstract: These constructions use equivalence classes of nodes on the interface between the subdomains into which the domain of a given elliptic problem has been subdivided, e. The coarse space elements are well defined even for irregular subdomains, are continuous, and well suited for use in two-level or multi-level preconditioners such as overlapping Schwarz algorithms. An analysis for scalar elliptic and linear elasticity problems ms reveals that significant reductions in the coarse space dimension can be achieved while not sacrificing the favorable condition number estimates for larger coarse spaces previously developed. These estimates depend primarily on the Lipschitz parameters of the subdomains. Numerical examples for problems in three dimensions are presented to illustrate the methods and to confirm the analysis. In some of the experiments, the coefficients have large discontinuities across the interface between the subdomains, and in some, the subdomains are generated by mesh partitioners. Balancing domain decomposition by constraints BDDC preconditioners have

been shown to provide rapidly convergent preconditioned conjugate gradient methods for solving many of the very ill-conditioned systems of algebraic equations which often arise in finite element approximations of a large variety of problems in continuum mechanics. These algorithms have also been developed successfully for problems arising in isogeometric analysis. One main purpose of this paper is to extend the theory, previously fully developed only for scalar elliptic problems in the plane, to problems of linear elasticity in three dimensions. Numerical experiments supporting the theory, are also reported. Some of these experiments highlight the fact that the development of the theory can help to decrease substantially the dimension of the primal space of the BDDC algorithm, which provides the necessary global component of these preconditioners, while maintaining scalability and good convergence rates. Certain pairs of drugs can cause death from their interaction. Knowledge of such interactions is held in drug interaction networks. The problem is that such networks may miss interactions that should be present and may include interactions that should be absent. Clearly, such information is valuable. Drug interaction networks are not unique in this regard. The same holds for protein-protein interaction networks, ecological networks, and many others. Improving the quality of such networks often requires a ground truth analysis e. Our contribution in this paper and the accompanying software is to create a program implementing their algorithmic ideas that is parallelizable and easy to modify for researchers who wish to try out new ideas. Our software can be found at https: Finding Prospects for Shopping Centers: We have developed an algorithm that predicts which store types are the best prospects to fill vacancies in shopping centers given the combinations of stores already there. The model is able to make predictions with accuracies up to This paper explains how the system was built and some user tests, not all of which were positive. The system can be found at http: The code for the project can be found at https: Detailed Analysis Author s: In this report we investigate the solution of boundary value problems on polygonal domains for elliptic partial differential equations. Many banking and commerce payment systems, especially in developing regions, continue to require users to share private or sensitive information in clear-text with untrusted providers exposing them to different forms of man-in-the-middle attacks. In this paper, we introduce Alphacodes, a new paradigm that provides a usable security solution that enables users to perform secure transactions with untrusted parties using the notion of visual puzzles. Alphacodes are designed as verification codes for short message transactions and provide easy authentication of critical portions of a transaction. We describe how Alphacodes can be applied in different use cases and also show two simple applications that we have built using the Alphacodes framework. We show security vulnerabilities in existing systems and show how our protocol overcomes them. We also demonstrate the ease of use of Alphacodes with minimal training using two simple mechanical turk studies. Using another simple real world user study involving 10 users who speak Kannada local Indian language, we show that the Alphacodes concept can be easily extended to other languages beyond English. Multicore in-memory databases often rely on traditional concurrency control schemes such as two-phase-locking 2PL or optimistic concurrency control OCC. Unfortunately, when the workload exhibits a non-trivial amount of contention, both 2PL and OCC sacrifice much parallel execution opportunity. In this paper, we describe a new concurrency control scheme, interleaving constrained concurrency control IC3, which provides serializability while allowing for parallel execution of certain conflicting transactions. IC3 combines the static analysis of the transaction workload with runtime techniques that track and enforce dependencies among concurrent transactions. Evaluations on a core machine using the TPC-C benchmark show that IC3 outperforms traditional concurrency control schemes under contention. It also scales better than several recent concurrent control schemes that also target contended workloads. Isogeometric analysis has been introduced as an alternative to finite element methods in order to simplify the integration of CAD software and the discretization of variational problems of continuum mechanics. In contrast with the finite element case, the basis functions of isogeometric analysis are often not nodal. As a consequence, there are fat interfaces which can easily lead to an increase in the number of interface variables after a decomposition of the parameter space into subdomains. Building on earlier work on the deluxe version of the BDDC family of domain decomposition algorithms, several adaptive algorithms are

here developed for scalar elliptic problems in an effort to decrease the dimension of the global, coarse component of these preconditioners. Numerical experiments provide evidence that this work can be successful, yielding scalable and quasi-optimal adaptive BDDC algorithms for isogeometric discretizations. An adaptive choice for primal spaces, based on parallel sums, is developed for BDDC deluxe methods and elliptic problems in three dimensions. The primal space, which form the global, coarse part of the domain decomposition algorithm, and which is always required for any competitive algorithm, is defined in terms of generalized eigenvalue problems related to subdomain edges and faces; selected eigenvectors associated to the smallest eigenvalues are used to enhance the primal spaces. This selection can be made automatic by using tolerance parameters specified for the subdomain faces and edges. Numerical results verify the results and provide a comparison with primal spaces commonly used. They include results for cubic subdomains as well as subdomains obtained by a mesh partitioner. Different distributions for the coefficients are also considered, with constant coefficients, highly random values, and channel distributions. Calvo, Juan Gabriel Abstract: These finite elements are conforming in H curl. A two-level overlapping Schwarz algorithm in two dimensions is analyzed, where the subdomains are only assumed to be uniform in the sense of Peter Jones. The coarse space is based on energy minimization and its dimension equals the number of interior subdomain edges. Local direct solvers are based on the overlapping subdomains. The bound for the condition number depends only on a few geometric parameters of the decomposition. This bound is independent of jumps in the coefficients across the interface between the subdomains for most of the different cases considered. A bound is also obtained for the condition number of a balancing domain decomposition by constraints BDDC algorithm in two dimensions, with Jones subdomains. For the primal variable space, a continuity constraint for the tangential average over each interior subdomain edge is imposed. For the averaging operator, a new technique named deluxe scaling is used. The optimal bound is independent of jumps in the coefficients across the interface between the subdomains. Furthermore, a new coarse function for problems in three dimensions is introduced, with only one degree of freedom per subdomain edge. In all the cases, it is established that the algorithms are scalable. Numerical results that verify the results are provided, including some with subdomains with fractal edges and others obtained by a mesh partitioner. Analyzing the Linux Build System Author s: Large-scale C software like Linux needs software engineering tools. But such codebases are software product families, with complex build systems that tailor the software with myriad features. This variability management is a challenge for tools, because they need awareness of variability to process all software product lines within the family. But having the complete set of compilation units with precise variability information is key to static tools such a bug-finders, which could miss critical bugs, and refactoring tools, since behavior-preservation requires a complete view of the software project. Kmax is a new tool for the Linux build system that extracts all compilation units with precise variability information. It processes build system files with a variability-aware make evaluator that stores variables in a conditional symbol table and hoists conditionals around complete statements, while tracking variability information as presence conditions. Kmax is evaluated empirically for correctness and completeness on the Linux kernel. Hsu, Jasmine; Shasha, Dennis Abstract: We describe the data sources and machine learning algorithms that go into the current version of http:

Chapter 9 : Martin Heidegger (Stanford Encyclopedia of Philosophy)

In the first place, process discovery enables organizations to unveil implicit processes and tacit knowledge. Moreover, the availability of a model that accurately describes the behavior in an event log allows for advanced analysis such as the identification of performance bottlenecks or the localization of paths in the process model that are.

This led to the establishment of a colonial Forest Service and from c. Forest Service personnel were also heavily involved in the organized conservation movement dating from the s. This organization turned to the colonial government to take legislative action regarding the protection of nature, thus stimulating the creation of nature and wildlife reserves. Alberta Patents from Red Deer and District Museum, Human Fallibility and Dangerous Technologies. Laboratories, Workshops, and Sites: Concepts and Practices of Research in Industrial Europe, Office for History of Science and Technology, Univ. Means of transportation, technical rationality and state logic. Examines the historical and cultural symbolism of the hand cart in Iran, with an attempt to explain its continued use today. The European Cities and Technology Reader: Industrial to Post-Industrial City. London and New York: Routledge, in association with the Open Univ. European Cities and Technology: Die totale Sonnenfinsternis am Technical innovation as a social transgression in Mexico. Analyzes the cultural significance of "commercializing" the traditional crafts beginning in the s in the upper Balsas Valley of Mexico. Science, Technology and Political Change You are not currently authenticated. View freely available titles: