Computing Reviews is happy to bring you the second annual list of notable items published in computing—this time for 2013. This year, we reached out to many in the computing community for nominations: our reviewers, CR category editors, the editors in chief of journals we cover, and computer scientists in both industry and academia.

We received a total of 108 nominations, but excluded those that were self-nominations or published outside of the 2013 calendar year. Therefore, you will find 94 items on our list, with numerous publishers represented. The items that have CR reviews are indicated by a symbol - . All reviews with that symbol are freely available on the site.

As we continue to improve our methods for collecting nominations and involve more of your peers in the computing community, we hope to bring you even more definitive lists in the coming years!

We welcome your feedback, and encourage you to email us with any questions (editorial@computingreviews.com). You may also download the full list as a PDF.

Angela Condon
Managing Editor
Computing Reviews

C. Computer Systems Organization


Dohler, M.; Ratti, C.; Paraszczak, J.; and Falconer, G. (Eds.) Smart cities. IEEE Communications Magazine 51, 6 (June 2013), 70-141.

Herlihy, M.; Kozlov, D.; and Rajsbaum, S. Distributed computing through combinatorial topology. Morgan Kaufmann.

Kormanynos, C. M. Real-time C++: efficient object-oriented and template microcontroller programming. Springer. Review


H. Information Systems


Cordeiro, R. L. F.; Faloutsos, C.; and Júnior, C. T. Data mining in large sets of complex data. Springer. Review


Lee, K.; Croy, A.; and Kim, H. Deciduous maps: a

Computing Reviews, the leading online review service for computing literature.


Wu, C. H.; and Irwin, J. D. Introduction to computer network and cybersecurity. CRC Press.

D. Software
Barnes, J.; Ada 2012 rationale (LNCS 8338). Springer.


Lochbihler, A. Making the java memory model safe. ACM Transactions on Programming Languages and Systems 35, 4 (Dec. 2013), Article No. 12.


Münch, J.; and Schmid, K. (Eds.) Perspectives on the future of software engineering; essays in honor of Dieter Rombach. Springer. Review

Nanevski, A.; Banerjee, A.; and Garg, D. Dependent type theory for verification of information flow and access control policies. ACM Transactions on Programming Languages and Systems 35, 2 (July 2013), Article No. 6. Review


E. Data

Pagh, R. Compressed matrix multiplication. ACM Transactions on Computation Theory 5, 3 (Sept. 2013), Article No. 9.

F. Theory of Computation

Barendregt, H. P.; Dekkers, W.; and Statman, R. Lambda calculus with types. Cambridge University Press. Review


Kirsh, D. Embodied cognition and the magical future of interaction design. ACM Transactions on Computer-Human Interaction 20, 1 (April 2013), Article No. 3. Review

Lee, N. Facebook nation: total information awareness. Springer. Review


I. Computing Methodologies
Bede, B. Mathematics of fuzzy sets and fuzzy logic. Springer.


Gwak, J.; and Sim, K. M. An augmented EDA with


Bürgisser, P.; and Cucker, F. *Condition: the geometry of numerical algorithms*. Springer. Review


**G. Mathematics of Computing**

Aggarwal, C. C. *Outlier analysis*. Springer.

http://computingreviews.com/recommend/bestof/notableitems_2013.cfm


Corless, R. M.; and Fillion, N. A graduate introduction to numerical methods and backward error analysis. Springer.


Cooper, S.; and Van Leeuwen, J. Alan Turing: his work and impact. Elsevier. Review


De Koven, B. The well-played game: a player's philosophy. MIT Press. Review


Sito, T. Moving innovation: a history of computer animation. MIT Press. Review 1 Review 2