STI 2006: Bibliography of Useful Book Materials

- Johnson, Steven. *Emergence: the connected lives of ants, brains, cities and software.* [Journey through emergence theory and its applications; explains why the whole is sometimes smarter than the sum of its parts. Presents examples of feedback, self-organization, and adaptive learning. From the back cover.[1]] Scribner.2001. ISBN: 0684868768. Available: Amazon for $9.49 + SH.[2]
- Barabasi, Albert-Laszlo. *Linked: how everything is connected to everything else and what it means for business, science, and everyday life.* [Takes an intellectual adventure to prove that social networks, corporations, and living organisms are more similar than previously thought.] Plume. 2003. ISBN: 0452284392. Available: Amazon for $ 9.75 + SH.
- Greene, Brian. *Elegant Universe: superstrings, hidden dimensions,and the quest for the ultimate theory.* [Peels away (some of) the layers of mystery surrounding string theory. Also, has published an up-date, *Fabric of the Cosmos*, 2005.] Vintage. 1999. ISBN: 0375708111. Available: Amazon for $ 10.97 + SH.
- Schelling, Thomas C. *Micromotives and Macrobehavior*. Norton. 1978. ISBN: 0393090094. Available: Amazon for $ 10.37.
- Gray, Theodore W. and Jerry Glynn. *Beginner's Guide to Mathematica2.* Addison-Wesley, 1992. [Designed to help new users get started quickly and easily. Book may be read end to end or used as a tutorial.] Available: Amazon for $ 21.95. Other versions available: 3, 4, 5. Prices vary: Version 5 is $ 69.95.
- Gleick, James. *Chaos: making a new science*. Viking. 1987. Available: Amazon for $ 13.00.
- Gel'fand, I. M. et. al. *Functions and graphs*. MIT 1990. [Translation, from the original Russian, of *Funktsii i grafiki*, originally published in 1967.] Available: Amazon for $ 7.95.
- Snyder, Lawrence. *Fluency with Information Technology: skills, concepts, and capabilities.* Pearson Education. 2004. Available: Amazon for $63.00.
- Harvey, Brian. *Computer Science Logo Style: intermediate programming*. MIT, 1985. NOT Available: Amazon secondary, out of stock dealer ...
- Committee on Information Technology Literacy. *Being Fluent with Information Technology*. National Academy Press. 1990. Available: Amazon: $32.00
- Strogatz, Steven. *Sync: the emerging science of spontaneous order*. Hyperion. 2003. Available: Amazon for $ 15.72.
- Moore, Margaret. *Geometry Problems for Logo Discoveries: explorations in turtle geometry.* Creative Publications. 1984. NOT Available: Amazon secondary, out of stock dealer ...
- CSTA [Computer Science Teachers Association] Curriculum Improvement Task Force. *New Educational Imperative: improving High School computer science education using worldwide research and professional experience to improve U. S. schools.* NOT Available ... order from publisher.
- Sierra, Kathy and Bert Bates. *Head First Java: your brain on java, a learner's guide.* O'Reilly Media, 2003. Available: Amazon for $28.32.
- Mlodinow, Leonard. *Euclid's Window: the story of geometry from parallel lines to hyperspace.* Free Press. 2003. Available: Amazon for $ 9.75.
- Gell-Mann, Murray. *The Quark and the Jaguar: adventures in the simple and the complex.* Freeman. 1994. Available: Amazon for $ 12.87.
- Friedman, Thomas L. *The World is Flat: a brief history of the twenty-first century.* Farrar, Straus and Giroux. 2005. Available: Amazon for $ 18.00.

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1   Unless otherwise noted, all book notes are derived from the back cover or the cover.
2   Normally, for orders in excess of $25.00 Amazon provides free shipping.

- Mau, Bruce. *Massive Change.* Phaedon. 2004. Available: Amazon for $19.77.
- Markham, Thom, et. al. *Project Based Learning Handbook.* Buck Institute for Education. 2003. Available: Publisher Direct ... www.bie.org or 415-883-0122.
- Shapiro, Martin. *Guiding Student Research: making research happen in your school*. NCSSSMST. 2004. Available: Publisher Direct ... www.ncsssmst.org . This handbook is a guide to creating various projects used by 'specialty' math and science academies ...
- Margolis, Jane and AllanFisher. *Unlocking the clubhouse: women in computing.* MIT. 2002. Available: Amazon for $10.50.
- Collins, Harry and Trevor Pinch. *Golem at large: what you should know about technology*. Cambridge U P. 1998. Available:Amazon for $10.19.
- Peak, David and Michael Frame. *Chaos under control: art and science of complexity*. Freeman. 1994. Available: Amazon for $16.47.
- Shammas, Namir. *Crash course in turbo C++: fastest way to learn turbo C++*. Que. 1994. Available: NOT available at Amazon. Out of stock. Out of print.
- Pacheco, Peter S. *Parallel programming with MPI.* Morgan Kaufman. 1997. Available: Amazon for $41.68.
- Hwang, Kai and Zhiwei, Xu. *Scalable parallel programming: technology, architecture, programming*. Available: Amazon for $136.25.
- Gladwell, Malcolm. *Tipping point: how little things can make a big difference*. Little, Brown. 2000. Available: Amazon for $8.97.
- Fomin, Dimitri, et. al. *Mathematical Circles.* AMS. 1996. Available: Amazon for $36.00.
- Zeitz, Paul. *Art and Craft of Problem Solving.* Available: Amazon for $77.95.

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