A Computer Science Reading List

by Ultan

Textbooks are not a requirement for all modules. Often School provided materials, classmates and a look online are more than enough. For some modules however a textbook is invaluable. The textbooks below are useful either as background reading or as a course textbook.

Junior Fresh

- Mathematics: Mathematics as a Language by Sara M. McMurry
- Introduction to Programming: Introduction to Programming Using Java by David J. Eck
- Introduction to Computing I/II: ARM Assembly Language - Fundamentals and Techniques by William Hohl and Christopher Hinds
- Digital Logic Design: Digital Design - With an Introduction to the Verilog HDL by Morris R. Mano and Michael D. Ciletti
- Electronics: Foundations of Electronics - Circuits and Devices by Russell L. Meade
- Computers & Society: Computing - A Concise History by Paul E. Ceruzzi, The Victorian Internet by Tom Standage
- Telecommunications: Data Communications and Networking by Behrouz A. Forouzan
- Programming Project: The Mythical Man Month by Frederick P. Brooks

Senior Fresh

- Algorithms and Data Structures: Algorithms by Robert Sedgewick and Kevin Wayne, Grokking Algorithms by Aditya Bhargava
- Systems Programming: Beej's Guide to C Programming by Brian Hall
- Telecommunications II: Data Communications and Networking by Behrouz A. Forouzan
- Information Management I: No textbook used
- Discrete Mathematics: No textbook used
- Concurrent Systems and Operating Systems: Operating Systems - Three Easy Pieces by Remzi H. Arpaci-Dusseau and Andrea C. Arpaci-Dusseau, The Spin Model Checker by Gerard J. Holzmann
- Microprocessor Systems: ARM Assembly Language - Fundamentals and Techniques by William Hohl and Christopher Hinds
- Computer Architecture I: No textbook used
- Programming Project II: Code Complete by Steve McConnell

Junior Sophister

- Symbolic Programming: Learn Prolog Now by Patrick Blackburn, Johan Bos and Kristina Striegnitz
- Software Engineering: No textbook used
- Computer Architecture II: No textbook used
- Compiler Design I: No textbook used
- Introduction to Functional Programming: Haskell Programming from First Principles by Christopher Allen and Julie Moronuki, Learn You a Haskell for Great Good by Miran Lipovaca
- Information Management II: No textbook used
- Computational Mathematics: Applied Numerical Methods with Software by Shoichiro Nakamura, Numerical Methods for Engineers and Scientists by Amos Gilat and Vish Subramaniam
- Software Engineering Group Project: No textbook used
- Concurrent Systems I: No textbook used
- Statistical Methods for Computer Science: A First Course in Probability by Sheldon Ross
- Advanced Telecommunications: Data Communications and Networking by Behrouz A. Forouzan
- Artificial Intelligence: Artificial Intelligence - Foundations of Computational Agents by David L. Poole and Alan K. Mackworth