

Chuck Connell

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Expert skills with all aspects of software development, across many programming languages and operating systems. I help organizations complete software projects on time, with high quality and low cost by contributing design, programming at the most demanding level and team leadership. I teach software engineering at Boston University and wrote the book *Beautiful Software* about program design and construction.

Skills

Programming: Java, C, C#, OO design, refactoring, LotusScript, assembler.

Leadership: agile methods, planning and scheduling, design/code reviews, testing, release management.

OS: Windows, Linux, VMware, embedded micro-kernels.

Tools: Eclipse/Java, NetBeans/Java, Visual Studio / .NET, soapUI, XML/DTD/WSDL, Domino Designer.

IBM/Lotus: Notes, Domino, Connections, Sametime, LotusLive, Traveler.

Work History

Owner of CHC-3 Consulting Inc, 1995 to present. I have implemented and led many software projects, including advanced Java and C programming, database API coding, Eclipse and Visual Studio IDE use, OO refactoring, design/code/rollout of enterprise legal applications, healthcare IT security audits, soapUI verification of web services, clustering virtual servers, extract/transform/load of data between disparate platforms, translation of binary records to/from XML, and others. Much of this work has been related to IBM products. Clients have included Alcoa, IBM, Mead Johnson and Standard & Poor's.

Computer science instructor, Boston University, ongoing. I teach a graduate-level course on software engineering, which I wrote. The course covers requirements analysis, software design, programming style, estimating and tracking, quality assurance and release management.

Development manager and principal engineer, IBM/Lotus, 1990 to 1995. I led the team that created the Notes C-language API kit and designed large-scale Notes/Domino applications. My positions included hands-on coding at the most advanced level, definition and ownership of a major product (the C API kit), and management of six engineers.

Consulting software engineer, 1985 to 1990. Projects included software to manipulate file format internals and tools to test database integrity. Clients included Digital Equipment, Apollo Computer, Ziff Davis and Lotus Development.

Education

Post-master certificate in computer science, Tufts University, 2009. Courses on computability, algorithms, compilers and software engineering.

M.A. computer science, Boston University, 1984. Thesis on approximation algorithms for NP-hard problems.

B.A. linguistic theory, Hampshire College, 1979. Senior thesis on formal semantics for natural language.

Sample Publications (full list of 50+ technical articles at BeautifulSoftware.com)

Beautiful Software. A book of essays/articles organized into three general topics: software design, management of software projects and the field of software engineering.

Analysis of a Software Version of DES. Cryptologia. Provides a cryptanalysis of a software variation of the hardware-based Data Encryption Standard.

Approximation Algorithms for NP-Hard Problems. BU master's thesis. Review of complexity theory in computer science, particularly the classes NP-complete and NP-hard, with a focus on one interesting NP-hard problem and an approximation algorithm for it.