1. Overview

Software security has blossomed nicely in the last few years with the appearance of new text books, new courses, and a government mandate, yet there are many people still to be educated. Savvy security people from the operations side tend to decry the cluelessness of software developers, putting the blame for our current software problems squarely on the shoulders of the "builders." However, builders cannot rightly be blamed for their lack of security knowledge, because security is only rarely a part of any standard curriculum. Getting the security message to developers, architects and other builders is an essential aspect of addressing the software security problem. Awareness training for software professionals (such as the kind carried out at both Microsoft and HP) is one way to do this. Integrating security thinking into the academic curriculum is another. But what kind of content should be covered? What works with developers, and what doesn't? This talk covers:

- Who needs to know what (builders, operators, and bosses)
- Why apprenticeship will not scale
- Awareness training do's and don'ts for professionals
- Sneaky tricks for getting security into the academic classroom
- The importance of teaching attacks and exploits
- Opinions on books and methods
The security problem is here to stay. Our approach to educating practitioners must be adjusted accordingly.

2. Biography

Gary McGraw researches software security and sets technical vision in the area of Software Quality Management. Dr. McGraw is co-author of four popular books: Java Security (Wiley, 1996), Securing Java (Wiley, 1999), Software Fault Injection (Wiley 1998), and Building Secure Software (Addison-Wesley, 2001). His fifth book, Exploiting Software, will be released in 2004. A noted authority on software and application security, Dr. McGraw consults with major software producers and consumers. Dr. McGraw has written over fifty peer-reviewed technical publications and functions as principal investigator on grants from Air Force Research Labs, DARPA, National Science Foundation, and NIST’s Advanced Technology Program. He serves on Advisory Boards of Counterpane and Indigo Security as well as advising the CS Department at UC Davis. Dr. McGraw holds a dual PhD in Cognitive Science and Computer Science from Indiana University and a BA in Philosophy from UVa. He regularly contributes to popular trade publications and is often quoted in national press articles.