Douglas Schmidt

Cornelius Vanderbilt Professor of Computer Science at Vanderbilt University
Nashville, TN, US

Expert in mobile cloud computing, cyber-physical systems, information technology and data privacy.

Biography

Schmidt is the Cornelius Vanderbilt Professor of Engineering in the Electrical Engineering and Computer Science Department, the Associate Provost of Research Development and Technologies, the Co-Director of the Data Science Institute, and a Senior Researcher at the Institute for Software Integrated Systems, all at Vanderbilt University. He is also a Visiting Scientist at the Software Engineering Institute (SEI) at Carnegie Mellon University. Schmidt is an internationally renowned and widely cited (an h-index of 83, an i10-index of 382, and a citation count of 39,100+) researcher whose work focuses on patterns, optimization techniques, and empirical analyses of object-oriented and component-based frameworks and model-driven engineering tools that facilitate the development of distributed real-time and embedded (DRE) middleware frameworks and mobile cloud computing applications on parallel platforms running over wireless/wired networks and embedded system interconnects. He has published 10+ books and 625+ papers (including 115+ journal papers) in top IEEE, ACM, IFIP, and USENIX technical journals, conferences, and books that cover a range of topics, including high-performance communication software systems, parallel processing for high-speed networking protocols, and distributed real-time and embedded (DRE) middleware with CORBA, Real-time Java, object-oriented patterns for concurrent and distributed systems, concurrent and networked software for mobile devices, and model-driven engineering tools. He has mentored and graduated 40+ Ph.D. and Masters students working on these research topics and has presented 550+ keynote addresses, invited talks, and tutorials on mobile cloud computing with Android, reusable patterns, concurrent object-oriented network programming, distributed system middleware at scores of technical conferences. Schmidt has co-authored several books in the Pattern-Oriented Software Architecture series for Wiley & Sons edited by Frank Buschmann of Siemens, including Patterns for Concurrent and Networked Objects, A Pattern Language for Distributed Computing, and Patterns and Pattern Languages. He has also co-authored two books for Addison-Wesley on the topic of C++ Network Programming edited by Bjarne Stroustrup of AT&T Labs.

Areas of Expertise

Computer Science, Risk and Reliability, Big Data, Digital Learning, Cyber-Physical Systems , Mobile Cloud Computing, Data Privacy, Data Breach, Distributed Real-Time and Embedded Middleware, Software Patterns and Frameworks, Data Science, Big Data Science and Engineering, Computer Engineering

Education

University of California
Ph.D. Computer Science

University of California
M.S. Computer Science

College of William and Mary
M.A. Sociology

College of William and Mary
B.A. Sociology

Accomplishments

Received the Award for Excellence in Teaching by the Vanderbilt University School of Engineering
2015
