Software Complexity: Implications for the Capability, Integrity, and Security of Large-Scale Software Systems

Business Network Meeting

Wednesday, May 11, 2011
Venue: Fidelity Investments, 245 Summer Street, Boston, MA
14th Floor, Auditorium Z (Unless Otherwise Noted)

Co-Organizers
- Hamid Benbrahim, Fidelity Investments
- Chris Wood, Santa Fe Institute

Agenda:

9:30 a.m. Registration

10:00 a.m. Welcome on Behalf of Fidelity Investments
Hamid Benbrahim, Fidelity Investments

10:05 a.m. Introduction to Software Complexity at Fidelity
Jin Chun, VP PWI Systems Group, Fidelity Investments

10:20 a.m. Welcome on Behalf of Santa Fe Institute
Chris Wood, Santa Fe Institute

10:25 a.m. Measures of Complex Systems in Science and Technology
Cosma Shalizi, Carnegie Mellon University and Santa Fe Institute

11:10 a.m. Model Checking: My 30 Year Quest to Conquer the State Explosion Problem
Edmund Clarke, Carnegie Mellon University

11:55 a.m. Lunch

12:55 p.m. Discovering and Enforcing Abstractions of Complex Systems
Patrick Lincoln, SRI International

1:50 p.m. Correcting Software Errors With Evolutionary Computation
Stephanie Forrest, University of New Mexico and Santa Fe Institute
2:35 p.m.  Break

2:45 p.m.  Verification and Validation of Large-Scale Software Systems  
*Ned Allen, Lockheed Martin*

3:30 p.m.  Break

3:40 p.m.  Complex Software Systems: Managing Methodology, Metrics and Human Nature  
*Susan Girgis, Cisco Systems*

4:25 p.m.  Wrap-Up: Implications for the Financial Industry  
*David Mordecai, President, Risk Economics, Inc.*

4:55 p.m.  Closing Remarks  
*Hamid Benbrahim, Fidelity Investments*

5:00 p.m.  Reception  
*FCAT Commons/Lobby Area – 3rd Floor*