



An Introduction to Use Case Modeling

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Open to IEEE members and non-members

5:15 Doors Open/Refreshments, 5:30 – 7:00 Presentation

Camera Club Theater at Kodak Theatre on the Ridge

200 Ridge Road West, Rochester, NY

Parking is available in the Visitor Lot on the south side of Ridge Road.

Enter at Kodak Theater on the Ridge and follow the Computer Society meeting signs.

<http://ewh.ieee.org/r1/rochester/comsoc/>

Summary: This interactive lecture discusses how to analyze the behavioral requirements of a complex software-intensive system and express those requirements with UML-based use cases.

Abstract: The ability to analyze and communicate the requirements of a software-intensive system is vital to its commercial success. The customers want to assure that the user experience captures the completeness of their vision. The system architect wants to design a blueprint for the proposed system that adapts to change and integrates with reusable components and legacy systems. The product managers want to plan for strategic releases that maximize market penetration and coincide with anticipated technology advances. The development team wants to implement a system that realizes the behavioral requirements, as well as the technical qualities and constraints. Quality engineers want to define test plans that optimize the correctness of the deployed system. All of these goals are achievable through practical use case modeling. This session introduces the basics of applying use cases to requirements analysis. It covers the identification of actors to delineate the system boundary. It focuses on the creation of essential and elaborated use cases. It explains how to structure a use case model to achieve practical decomposition and reusability. It provides a template for specifying use cases and presents guidelines for writing them effectively. It explains how to graphically convey the artifacts of requirements analysis using the Unified Modeling Language diagrams. The Unified Modeling Language (UML) is the official standard for expressing the various models generated during the software development process, as governed by the Object Management Group (OMG). Finally, the class attendees analyze a small example problem with the instructor as facilitator. This session is intended for any system analyst, architect, project manager, developer, or quality engineer who wants to understand or employ use cases.

Biography: Michael Donahue has been a software engineer long enough to have once appreciated being called a programmer. When advised in high school that computer science was a burgeoning field, what with the race to the moon and all, he did not give the discipline much consideration. He eventually graduated from R.P.I. with a M.S. degree in applied mathematics and a minor in frisbee tossing. After applying numerical techniques to commercial airplane development at the Boeing Company, he moved back east and settled in Brockport. He has since been involved in several software development efforts at Eastman Kodak as an individual contributor, project lead, architect, and manager. His current activities involve architectural and design support to consumer and professional imaging development teams. He refrains from using architect as a verb, has been known to play the Eels after Steely Dan, and thinks he would like to take a crack at running a bed and breakfast someday. He is also the developer and primary instructor for the object technology introduction, analysis and design, use case, and UML overview courses at Kodak.

April 10/, 2003 “Object Recognition Using Large Structural Modelbases” by Dr. Kim L. Boyer, Signal Analysis and Machine Perception Lab, The Ohio State University. This Computer Society presentation will be at the Rochester Section Joint Chapters Meeting. Dinner Keynote: Merrill Buckley, longtime IEEE activist and former President of IEEE-USA.