

## COSC FACULTY CANDIDATE 2010 SEMINAR

SPEAKER: Dr. Christian Bird, University of California, Davis  
DATE: APRIL 12, 2010  
TIME: 11:00 AM  
WHERE: PGH 232

HOST: Dr. Shishir Shah

TITLE: SocioTechnical Effects in Software Teams

### Abstract:

As software continues to grow in size and complexity, so do development teams. Consequently, coordination and communication within these teams play larger roles in productivity and software quality. My research focuses on the relationships between developers in large software projects and how software affects and is affected by these relationships. Fortunately, source code repository histories, mailing list archives, and bug databases contain latent data from which we can reconstruct a rich view of a project over time and analyze these sociotechnical relationships. In this talk, I will present the results of some empirical studies whose goal is to answer questions that can help software project leaders understand and make decisions about their own teams: Does geographically distributed development necessarily adversely impact software quality? What is the effect of ownership and expertise on defects in different process domains? Are large open source projects really organized like bazaars or do they suffer from the effects of Brooks' Law?

### Bio:

Christian is a Ph.D. candidate at the University of California, Davis, where he studies Empirical Software Engineering under advisor Prem Devanbu. He is primarily interested in the relationship between software design and social dynamics in large development projects, and the effects on productivity and software quality. He has studied software development teams at Microsoft, IBM, and in the Open Source realm, examining the effects of distributed development, ownership policies, and the ways in which teams complete software tasks. He is the recipient of the ACM SIGSOFT distinguished paper award, and the "Best Graduate Student Researcher" award in his Department. He has published a "Research Highlight" in CACM and was a National Merit Scholar at BYU, where he received his B.S. in computer science.