COMPUTER SCIENCE SEMINAR

From Barriers to Bridges: Designing Infrastructures for Help in Online Programming Communities

> Denae Ford, PhD North Carolina State University

Abstract: Online programming communities, like Stack Overflow, have norms that are not obvious nor inclusive to the 50 million programmers visiting monthly. For example, many novices ask questions that go unanswered or downvoted for not conforming to unwritten community norms. In this talk, I will present my findings from two research projects: 1) a framework of challenges users face when engaging in these communities and 2) a formative-feedback design intervention based on this framework that improved participation and acclimates users to on-site cultural norms. We find that challenges, such as a fear of negative feedback and intimidating community size, can dissuade programmers, especially novices and women, from participating in the community and forging on to become experienced contributors. To determine how to increase participation, we apply theory from a guided mentorship. In our approach, we find that mentored questions are substantially improved over non-mentored questions, with average scores increasing by 50

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