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Presents the Spring 2014 EECS Seminar Series
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"Boa: A language and a BIGDATA repository for Democratizing Ultra-Large-Scale Software Repository Mining"
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In today's software-centric world, ultra-large-scale software repositories, e.g. SourceForge (350,000+ projects), GitHub (250,000+ projects), and Google Code (250,000+ projects) are the new library of Alexandria. They contain an enormous corpus of software and information about software. Scientists and engineers alike are interested in analyzing this wealth of information both for curiosity as well as for testing important research hypotheses. However, the current barrier to entry is often prohibitive and only a few with well-established research infrastructure and deep expertise in mining software repositories can attempt such ultra-large-scale experiments.

This talk will describe our work on the Boa language and its BIGDATA repository containing 700,000+ open source projects for analyzing ultra-large scale software repositories to help with such experiments. Boa's better abstractions significantly decreases the burden of the scientists and engineers analyzing human and technical aspects of open source software development allowing them to focus on the essential tasks of scientific research.

BIOGRAPHY

Hridesh Rajan is an Associate Professor of Computer Science, Software Engineering, and Information Assurance at Iowa State University, where he has been since 2005. His research aims to improve software quality and programmer productivity by development and refinement of means of abstraction in computer programming languages.

Hridesh earned his MS and PhD, both in Computer Science, from the University of Virginia in 2004 and 2005 respectively. He earned his undergraduate degree from the Indian Institute of Technology, Banaras Hindu University (formerly IT-BHU) in 2000. At Iowa State University, he has been recognized by the US National Science Foundation (NSF) with a CAREER award in 2009 and by the college of LAS with an Early Achievement in Research Award in 2010, and a Big-12 Fellowship in 2012. Before his graduate studies at the University of Virginia, he was a Member of Technical Staff at Bell Labs, Lucent Technologies in Bangalore India from 2000 - 2001.

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