**Stanford University**  
Department of Statistics

**DEPARTMENTAL SEMINAR**

3:30pm, Wednesday, July 6, 2016  
Hewlett Teaching Center Room 201  
*** Note Special Day, Time and Venue ***

**Speaker:**  Viral Shah, *Julia Computing, Inc.*

**Title:**  Julia: A Fresh Approach to Numerical Computing

**Abstract:**

This talk will focus on the current state of Julia development, the compiler, and the package ecosystem.

Julia is a high-level, high-performance dynamic programming language for technical computing, with syntax that is familiar to users of other technical computing environments. It provides a sophisticated compiler, distributed parallel execution, numerical accuracy, and an extensive mathematical function library. Julia’s Base library, largely written in Julia itself, also integrates mature, best-of-breed open source C and Fortran libraries for linear algebra, random number generation, signal processing, and string processing. In addition, the Julia developer community has already contributed 1000 external packages through Julia’s built-in package manager at a rapid pace.

The Third Annual JuliaCon, held recently at MIT, attracted more than 250 participants and incorporated over 50 talks, including keynotes by Nobel Laureate economist Tom Sargent, Scheme designer Guy Steele and Julia hacker Tim Holy.

**About this Speaker:**  Viral Shah is one of the creators of the Julia language. He received his Bachelor’s in Engineering from University of Mumbai and a PhD in Computer Science from UC Santa Barbara. He is a co-founder of Julia Computing, Inc.