Shrutarshi Basu

CONTACT INFORMATION Apartment #1, 220 North Quarry Street Ithaca, NY 14850 484-284-0854 shr@basus.me http://basus.me

EDUCATION

Cornell University, PhD Program in Computer Science, expected graduation in 2015

Lafayette College, PA Magna Cum Laude in 2011

- B.S. Electrical and Computer Engineering with Honors
- B.A. Computer Science with Honors

HONORS AND AWARDS **J.J. Ebers Memorial Award, 2011** for "high academic achievement and noteworthy professional interest in the field of electrical engineering."

CRA Undergraduate Outstanding Research Award, 2010 – Honorable Mention

James P. Schwar Prize, 2010 awarded to a computer science student on faculty nomination

William G. McClean Tau Beta Pi Engineering Prize, 2009 for "an engineering student who has excelled in academics and extracurricular activities during the first three semesters."

Member of **Tau Beta Pi** (Engineering), **Eta Kappa Nu** (Electrical and Computer Engineering) and **Upsilon Pi Epsilon** (Computer Science) Honor Societies

TECHNICAL SKILLS Platforms: Linux, Mac OS X,

Programming Languages: Python, Ruby, JavaScript, C++, C, Java, OCaml

Other tools: Git, Subversion, LATEX, GNU Make, Bash

Professional Experience **Software Engineering Intern** at GrammaTech Inc.

May 2011 – August 2011

Worked on performance improvements to the CodeSonar static analysis tool. Gained experience in learning, navigating and improving a large C/C++ codebase

EXCEL Research Scholar at Lafayette College May 2008 – May 2009, May 2010 – May 2011 Worked under Dr. Chun Wai Liew to build a declarative programming interface and modular graphics engine for creating fractal patterns

Undergraduate Researcher at Virginia Tech

June 2009 – January 2010

Worked under Dr. Barbara Ryder researching program representations for blended analysis. Modified existing program analysis tool and used it to analyze real-world Java programs

Technical Assistant at Lafayette College Foreign Language Center *January* 2008 – May 2011 Evaluated new software packages for use by foreign language students. Designed web templates for language students and conducted workshops.

PROJECTS

Freon: A novel network architecture

January – May 2012

A novel architecture for datacenter network management using end hosts to perform the majority of the packet processing work. A component of the Frenetic project.

Proctor: An Actor library for Ruby

January – May 2011

Threaded, concurrent Actors in Ruby using a prototype-based programming style. Makes extensive use of Ruby's metaprogramming abilities

WimpFi: Wireless Peer-to-peer Communications NetworkAugust – December 2010
Allows personals computer to communicate via RF-transceivers implemented on FPGAs. Implements a reduced version of the IEEE 802.11g with collision avoidance and exponential backoff.

Metaphor: A declarative approach to computational art

May 2008 – December 2010

Software for visual artists to leverage computational tools. A declarative programming language as an interface to graphical libraries.