Skanda Koppula

450 Memorial Drive
Cambridge, MA 02139

skoppula@mit.edu
github.com/skoppula
1.412.259.3123

Massachusetts Institute of Technology

Major: Computer Science and Engineering, BSc, GPA: 4.6/5.0   *Class of 2017*

Relevant courses: Constructive Computer Architecture, Applied Cryptography, Artificial Intelligence, Software Architecture, Computer Systems Engineering, Design and Analysis of Algorithms, Machine Learning, Computation Structures, Lab Assistant for Intro to EECS

Projects and Work Experience

Intern at Square Security Team   *June 2015 - Aug. 2015*
Upcoming!

Interface for Battery Management System with LPC11CX4   *Jan 2015 - Present*
Electric Vehicle Team
- Programmed LPC11CX4 microcontroller to read SPI messages from other peripherals
- Built circuit that uses CAN to SPI converter to feed messages to LPC11CX4
- System interfaces with battery management system of an electric vehicle to read/change current battery charging status

Cache Coherency Protocol in Out-of-Order Processor   *Sept. 2014 - Dec. 2015*
6.175 Final Project - Multicore Architecture
- Used Bluespec Verilog to implement a non-blocking cache hierarchy
- Integrated non-blocking cache heirarchy into an implementation of a instruction-order-optimizing processor

BattleCode AI Competition   *Jan. 2015*
Team of Three
- Built an AI to compete in Star-craft like game
- Designed message encoding scheme over simulated communication channel, task scheduling and completion scheme, and processor-use optimization
- Top-ten in rookie division in tournament, out of fifty

Bayesian-Based Prognostic Modeling of Genetic Diseases   *Jan 2013 - Oct. 2013*
CSAIL's Biomedical Cybernetics Lab
- Designed Bayesian procedure to predict the onset of alcoholism and lung cancer ($\overline{AUC} = 0.84$)
- Presented at Am. Medical Informatics Assoc. San Fran 2013. Published in AMIA Proceedings

Skills

- Familiar with **C, x86 Assembly, Bluespec Verilog**, **Java**, **Python**, **bash**

Awards

Silver Medalist in the USA Mathematics Talent Search	2013
First Place Undergrad Research Poster - NSF TeraGrid Supercomputing Conference	2012
Finalist in the Google International Science Fair	2011

Other interests

- Blogging about coding, technology, and art at skoppula.github.io
- Doing Project Euler, USACO, and TopCoder problems
- Teaching: *Applied Algorithms*, *Biochemistry - Kitchen Edition*, *Conversational German* among others
- Helping out run EECScon, MIT's EECS research conference