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 *Expected 2017*

Relevant courses: Constructive Multicore Architecture, Artificial Intelligence, Software Architecture, Design and Analysis of Algorithms, Biostatistics and Genetics, Machine Learning, Computation Structures, Lab Assistant for Intro to EECS

Teaching Experience!

Applied Algorithms in a Romantic World *June 2014 - Aug. 2014*
Teacher for HSSP, an ESP program

- Taught a class of 30 motivated high-school students topics in introductory algorithms
- Graded problem sets, covering topics from dynamic programming to graph search

TutoringPlus Tutor at Cambridge Upper Middle School *Jan 2014 - May 2014*
Part of TutoringPlus in Cambridge

- Worked with under-achieving students at CUMS in an after-school program to improve their performance in core classes (math, science, and reading comprehension)

Youth Development Organization Science Olympiad Co-Director *Jan 2013 - May 2013*
Hosted at Phillips Academy Andover, MA

- Organized program to teach underserved students from schools in Lawrence, MA science olympiad topics (chemistry, biology, physics, and earth science)
- Decided curricula, recruited teachers, and filled in as substitute during teacher absences

Andover Lawrence Strings *November 2012 - May 2013*
Hosted at Phillips Academy Andover, MA

- Taught free private violin lessons to low-income students from Lawrence Middle School as part of the Andover-Lawrence Strings Program

Other interests

- Conversation German, beginning Korean, and Telegu
- Blogging about coding, technology, and art at skoppula.github.io
- Building electric vehicles (currently working on a mini-motorcycle)
- Helping out run EECScon, MIT's EECS research conference

Projects and Work Experience

Structure-Based Statistical Modeling of Protein Interactions *May 2014 - Aug. 2014*
Informatics Intern at the Keating Lab

- Co-developed five-term frequency-analysis procedure to predict the stability of protein complexes
- Achieved $> 350\%$ speed-up via algorithmic changes (e.g. developing pre-processed libraries) and extending rate-limiting Python sections with C
- Submitting to *PLoS Computational Biology, Software*

Bayesian-Based Prognostic Modeling of Genetic Diseases *Jan 2013 - Oct. 2013*
Research Student at CSAIL's Biomedical Cybernetics Lab

- Built 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