

timql.github.io
github.com/timql

# Education

### B.A. in Computer Science (expected), Boston University.

Sep 2013 – May 2017

- · Minor in Philosophy.
- · GPA: 4.0 in-major; 3.94 overall.
- Completed coursework includes: Analysis of Algorithms, Fundamentals of Computing Systems,
   Combinatorics, Programming Languages, Graph Theory, Computer Networks, Probability, and Multivariate Calculus.
- · Planned coursework includes: Data Mining, Logic, and Modern Algebra.

# Experience

## Software Engineering Intern, Google Inc.

May 2016 - Aug 2016

Worked extensively in Python and the Google build system (Bazel) to make crucial improvements to the reliability of an internal latency testing service used by teams including Maps, Ads, and Youtube:

- · Wrote a tool to test new canary releases as a part of the server-side release process, providing increased test coverage and a clear-cut indicator of stability.
- Set up the logic and workflow for a continuous client-side release process, decoupling the team's infrastructure from potential breakages introduced into the monolithic Google codebase.
- · "Exceeded expectations" in final evaluation.

#### Undergraduate Researcher, Boston University & Tufts University.

May 2015 - May 2016

- Wrote code to compute diffusion-based distance and functional similarity metrics on protein-protein interaction (PPI) networks in parallel using Numpy, NetworkX, and Python's multiprocessing module.
- Designed experiments and generated plots using Matplotlib to analyze how well various metrics performed as predictors of function.
- · Uncovered major distortions in our metrics caused by structural properties of the PPI networks.

## Skills

- · Python; Java; C (basic); Haskell (basic); IA32 Assembly (basic); SQL (basic)
- · HTML/CSS; LaTeX; Numpy; NetworkX; Matplotlib; Bazel; Git; Linux
- English (native); Mandarin (conversational); Japanese (basic)

# Projects

- **APT Detection** (Fall 2015). Used graph-theoretic methods and belief propagation, a learning algorithm, on DNS log samples from the Los Alamos National Laboratory to detect network attacks.
- **Language Tools** (Fall 2015). Wrote a parser, interpreter, type-checker, compiler, and bounded exhaustive tester for a small embedded programming language in Haskell.
- **Connect-Four** (Fall 2014). Player AI for a Connect-Four program in Java using Minimax search and Alpha-Beta Pruning. (Accidentally) beaten just 5 times out of ~500 games played.

### **Awards**

- · Sponsor prizes from HP and Linode at AngelHack Boston 2015 for a web application designed to find "happier" routes for users to travel by.
- · Research award, Boston University Undergraduate Research Opportunities Program (Fall 2015, Spring 2016).

#### Interests

· Coffee brewing; Rock climbing; Solo travel; Wes Anderson films; Existentialism