Michael Tran

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http://trankmichael.github.io/

Education

- **Tufts University School of Engineering** — Somerville, MA
  B.S.C.S. Computer Science — B.S. Mathematics GPA: 3.4 — *August 2012 - May 2016*
  - **Important Courses:**
    - **Computer Science:** Statistical Pattern Recognition, Programming Languages, Web Development, Probabilistic System Analysis, Algorithms, Computer Security, Machine Structure, Digital Logic Circuits
    - **Math:** Computational Geometry, Abstract Algebra, Real Analysis, Linear Algebra, Discrete Mathematics

Experience

- **Enigma – Tufts Independent Data Journal** — Medford, MA
  Editor — *January 2015 – Current*
  - organized and worked on a semester project
  - generated problems for the Anagram section of programmming and math puzzles
  - led workshops for the Tufts community for anyone interested in data science and statistical analysis
- **Tufts University (Math Department)** — Medford, MA
  Grader — *September 2015 – Current*
  - graded for a class of 34 students
- **CoreLogic** — Irvine, CA
  Product Development Software Engineering Intern — *June 2015 – September 2015*
  - wrote Python scripts to help automate the development mockup process necessary in a system migration
  - wrote Python scripts to monitor the performance metrics of different application builds in AppDynamics and QuickBuild
  - worked on UX features and debugging in the Admin web application front end built using Javascript and Ext JS
- **Tufts University (Computer Science Department)** — Medford, MA
  Teaching Assistant — *January 2014 – June 2014*
  - Worked directly with and assisted students during weekly office hours
  - Graded and debugged student submissions, projects, and design documents
  - Taught weekly labs where students practiced programming skills such as sorting, recursion, and dynamic memory

Skills

Languages: C/C++, Python, Javascript, Java, Go, Ruby

Computer and OS: Linux/Unix, Vi/Vim, Windows, VMWare, IntelliJ

Libraries and Tools: Git, Subversion, Vi/Vim, zsh, Ext JS, IntelliJ, NumPy and pandas

Projects

Network Alarm: This alarm monitors either a live stream of network packets or an Apache web log for a variety of incidents. Implemented in Ruby, the program detects port scanning attacks and leaked credit card information in a live network stream. Given a web log, the program detects NMAP scans, HTTP error codes, embed shellcode, and leaked credit card information.

Mockup Parser: A python command line tool used to generate and parse Balsamiq Mockups using their JSON representation. Used to verify Balsamiq Mockups against database requirement spreadsheets for a system migration.

Dynamic Power Management in the Android Kernel: Senior Capstone project focused on low level android kernel programming. Specifically, will focus on generating statistical models for how the Android operating system handles storage and radio components, and trying to improve the power consumption of each of these components. Upon completion, these models and solutions plan to be integrated current research on processors and memory frequency governors.