Michael Tran

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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

- **Philips Healthcare (Information Security Research)** — Andover, MA
  Security Analyst — *June 2016 – Current*
  - worked on redteaming and vulnerability enumeration
  - researched and created machine learning algorithms for analysis of both internal and external data sources to relieve SOC workload
  - engaged in third party vendor comparisons and evaluations for enterprise security solutions

- **Tufts University (Computer Science Department)** — Medford, MA
  Algorithms - Teaching Assistant — *January 2016 – May 2016*
  - assisted students during weekly office hours
  - Graded student assignments and exams
  - worked with students to understand areas such as sorting, recursion, and dynamic memory

- **Enigma – Tufts Independent Data Journal** — Medford, MA
  Editor — *January 2015 – December 2015*
  - 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

- **CoreLogic** — Irvine, CA
  Product Development Software Engineering Intern — *June 2015 – September 2015*
  - developed a Python application to help automate the development mockup process necessary in a system migration
  - developed a Python application to monitor the performance metrics of different application builds in AppDynamics and QuickBuild
  - updated UX features and debugging in the Admin web application front end built using Javascript and Ext JS

Skills

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

Libraries and Tools: Git, Django, PyObjC, Ext JS, NumPy, Scikit, plot.ly

Projects

Phishing Protection Analytics: A python implementation of phishing detection models for Outlook on both OS X and Windows. The application uses three separate prediction models to classify emails based on semantic content analysis, link/url analysis, and email header analysis.

Math Modeling ROI in Secondary Education Institutions: This project was submission to the 2016 Math Contest in Modeling. Working in a team of three, developed a potential lump sum investment strategy. Statistical analysis methods like Lasso Regression, PCA, and Random Forest regression were used to determine which institutions would benefit most from direct increases in areas such as faculty salary and endowment.

Data Depth Explorer: Interactive visualizations and descriptions of three different types of multivariate statistical data depth created using Processing.js and Bootstrap. Allows users to input or generate random data to visualize the various statistical centers of point sets.