Ashwin Madavan

21956 Oakleaf Ct., Cupertino, CA 95014
ashwin.madavan@gmail.com
408.833.3464

Education

The University of Texas, Austin, TX **Class of 2018**
B.S. Computer Science, Turing Scholar Honors; B.S. Pure Mathematics
Undergraduate Computational Finance (UCF) Member

Honors Courses		Other Courses	
Data Structures	Computer Architecture	Discrete Math	Compilers
Operating Systems	Computer Vision	Quantum Computing	Topology
Linear Algebra	Algorithms and Complexity	Statistics	Computer Graphics

Work Experience

Affirm, San Francisco, CA. Software Engineering Intern **May - August 2017**

- ≫ Worked on platform infrastructure
- ≫ Designed and built a parallelized ETL framework in Python
- ≫ Dramatically increased performance for large batch processing jobs

Twitter Inc., San Francisco, CA. and London, UK. Software Engineering Intern **May - December 2016**

- ≫ Worked on Manhattan; the multi-tenant, highly available, key-value store
- ≫ Designed and built a distributed, hierarchical rate limiter in Java
- ≫ Implemented distributed database compaction to reclaim unused disk space, while keeping servers online
- ≫ Designed and built a topology management service for all Twitter distributed storage services in Scala

Salesforce.com, San Francisco, CA. Software Engineering Intern **May - August 2015**

- ≫ Worked in security; identity management and authentication
- ≫ Tested, debugged, and created upgrade plan for SCIM, an open cloud user provisioning standard
- ≫ Debugged authentication issues for large customers
- ≫ Developed end-to-end test framework for two-factor authentication, OAuth, and SAML in Selenium and JUnit
- ≫ Fixed security bugs for the Summer 2015 release

Projects

Personal Website: `https://madavan.me`; GitHub: `https://github.com/ashwin153`

Caustic: Reinventing Database Transactions

- ≫ Distributed transactions on arbitrary key-values stores
- ≫ Article available at `https://madavan.me/projects/caustic.html`

VIX Futures Roll (2016)

- ≫ Developed an algorithm to trade volatility futures
- ≫ Article available at `https://madavan.me/projects/vix.html`

PacMan: Evolving an AI (2015)

- ≫ Wrote the classic arcade game in Java
- ≫ Designed a neural network that was trained using binary genetic algorithm
- ≫ Article available at `https://madavan.me/projects/pacman.html`

Technical Skills

Proficiency: Scala, Java, Python, Cxx, LaTeX, SQL
Exposure: JavaScript, Android, x86 Assembly, Verilog, MATLAB, R