# Ashwin Madavan

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## Education

**University of Texas** **May 2018**
*B.S. Computer Science, Turing Scholar Honors; B.S. Pure Mathematics* *Austin*

| Honors Courses | | Other Courses | |
|---|---|---|---|
| Data Structures | Computer Architecture | Distributed Systems | Compilers |
| Operating Systems | Computer Vision | Quantum Computing | Topology |
| Artificial Intelligence | Algorithms and Complexity | Statistics | Computer Graphics |

## Work Experience

**Affirm** **May - August 2017**
*Software Engineering Intern* *San Francisco*

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

**Twitter** **May - December 2016**
*Software Engineering Intern* *San Francisco, London*

- ≫ Worked on Twitter's 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** **May - August 2015**
*Software Engineering Intern* *San Francisco*

- ≫ Worked on security in identity management and authentication
- ≫ Tested, debugged, and created upgrade plan for SCIM, an open cloud user provisioning standard
- ≫ 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)**

- ≫ A genetically-trained neural network for the classic arcade game.
- ≫ Article available at `https://madavan.me/projects/pacman.html`

## Skills

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