# ASHWIN MADAVAN

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(408) 833-3464

## EDUCATION

## University of Texas

B.S. Computer Science, Turing Scholar Honors; B.S. Pure Mathematics

# WORK EXPERIENCE

Two Sigma

Software Engineer

- » Worked on trading systems at Two Sigma Securities and data platforms at Two Sigma Investments
- $\gg$  Built a framework in Java for translating messages from one serialization format to another
- $\gg$  Built a multi-asset class manual trading system in Java
- $\gg$  Built support for retail options and international markets in the post-trade system
- $\gg$  Built a forecasting platform in Python that features dynamic data dependencies

### Affirm

Software Engineering Intern

- $\gg$  Worked on platform infrastructure
- $\gg$  Built a parallelized ETL framework in Python

#### Twitter

Software Engineering Intern

- » Worked on Twitter's multi-tenant, highly available, key-value store
- $\gg$  Built a distributed, hierarchical rate limiter in Java
- $\gg$  Built a topology management service in Scala for all Twitter distributed storage services

#### Salesforce

Software Engineering Intern

- $\gg$  Worked on security in identity management and authentication
- >> Built an end-to-end test framework for two-factor authentication, OAuth, and SAML in Selenium and JUnit

## PROJECTS

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

#### Caustic: A Transactional Programming Language (2018)

- $\gg$  A programming language for transactional key-value stores
- >> Article available at https://madavan.me/projects/caustic.html

#### VIX Futures Roll (2016)

- $\gg$  An algorithm for trading volatility futures
- >> Article available at https://madavan.me/projects/vix.html

#### Swara: Algorithmic Music (2016)

- $\gg$  A musical machine learning framework
- >> Article available at https://madavan.me/projects/swara.html

#### PacMan: Evolving an AI (2015)

- $\gg$  A genetically-trained neural network for the classic arcade game
- >> Article available at https://madavan.me/projects/pacman.html

September 2018 - Present New York

May 2018

Austin

May - December 2016

San Francisco, London

May - August 2017

San Francisco

May - August 2015

San Francisco