# Ashwin Madavan

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#### **EDUCATION**

## The University of Texas, Austin, TX (3.7)

Data Structures

Operating Systems

Linear Algebra

Class of 2018

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

Honors Courses

Computer Architecture Discrete Math
Computer Vision Vector Calculus
Differential Equations

Probability
Real Analysis
Financial Accounting

Other Courses

## Work Experience

#### 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
- $\gg$  Debugged authentication issues for large customers
- $\gg$  Developed end-to-end test framework for two-factor authentication
- ≫ Fixed security bugs for the Summer 2015 release

#### Leapset, Inc., Redwood City, CA. Summer Software Intern

May - August 2013, 2014

- >> Built kiosk software that is shipped with point of sale demonstration units in HTML, CSS, and JavaScript
- >> Developed receipt printing code shipped with the terminal software in Node.js
- >> Created corporate tools to simplify invoice generation and manage commisions using Spring and Hibernate
- >> Designed and built Java data-mining crawler to harvest restaurant profiles
- >> Developed prototype that delivers location-based ads using Estimote Beacons

## Micello, Inc., Sunnyvale, CA. Summer Software Intern

June - August 2012

- >> Developed Local Apps, a location-based application discovery tool
- $\gg$  Available on both Android and iPhone and utilizes JAX-RS web services
- $\gg$  Published version with limited functionality later sold in IP sale

## **PROJECTS**

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

#### Automated DCF Analysis (2015)

- >> Developed a neural network to forecast future free cash flows
- >> Utilized backpropagation to train network on historical SEC data
- ≫ Article available at http://ashwin153.github.io/2015/05/16/stocks/

#### Evolving a PacMan AI (2015)

- >> Developed a Java version of the classic arcade game from scratch
- >> Created neural network that was trained using binary genetic algorithm
- ≫ Network survived 22 seconds and earned 1740 points
- Article available at http://ashwin153.github.io/2015/04/20/pacman/

#### Music Generation Using Markov Chains (2014)

- >> Developed Markov Chains to generate original music from sample songs
- Article available at http://ashwin153.github.io/2014/11/06/music/

#### TECHNICAL SKILLS

Proficiency: Java, MySQL, Android, C

Exposure: x86 Assembly, Spring, Hibernate, JavaScript, LATEX, Verilog, MATLAB