

# ASHWIN MADAVAN

2101 Rio Grande St. #18009, Austin, TX 78705

ashwin.madavan@gmail.com

408.833.3464

---

## EDUCATION

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

**Class of 2018**

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

### Honors Courses

Data Structures  
Operating Systems  
Linear Algebra

Computer Architecture  
Computer Vision  
Differential Equations

Discrete Math  
Vector Calculus

### Other Courses

Probability  
Real Analysis  
Financial Accounting

---

## 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
- » 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

**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 commissions 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
- » Available on both Android and iPhone and utilizes JAX-RS web services
- » 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, L<sup>A</sup>T<sub>E</sub>X, Verilog, MATLAB