# Ryan Chapman

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#### **EDUCATION**

University of California, Berkeley | Electrical Engineering and Computer Science

May 2017

UC GPA 3.91

Honors Regents' and Chancellor's Scholar Finalist (Top 1% of applicants to UC Berkeley)

Tau Beta Pi Engineering Honor Society Member (Top 1/8th of engineering school)

Kairos Society Fellow (1 of 25 active fellows in the UC Berkeley Chapter)

Coursework Artificial Intelligence, Machine Learning, Deep Learning, Database Systems, Computer Security,

Efficient Algorithms and Intractable Problems, Discrete Math and Probability Theory, Data Structures

## WORK EXPERIENCE

## Apple Inc. | Machine Learning Engineer Intern

May 2016 - Aug 2016

- Developed machine learning algorithms and architecture for the iOS Keyboard Team
- Wrote a research paper and presented my project to the VP of iOS Software Engineering and his direct reports

#### **Apple Inc.** | Software Engineering Intern

May 2015 – Aug 2015

- Implemented a top level feature for the iOS Keyboard that significantly improves human to human communication
- Contributed to the existing UIKit, TextInput, and Third-party keyboard frameworks

## TouchFreight | Co-Founder and Co-Lead Software Engineer

Sept 2014 - May 2015

- · Oversaw the architecture, design, and execution of a full stack iOS application and its accompanying web portal
- Winner of the 2015 University Mobile Challenge, an annual global competition held in Barcelona, Spain with 130 of the world's best college startup teams competing (See demo at goo.gl/8w3sPT)

## **App Soto Inc.** | Mobile Application Development Intern

May 2014 - Aug 2014

- Contributed 4000+ lines of code toward the development of 2 mobile apps, Belike and Spritzr, that are in the App Store
- Selected to learn and develop in Swift with Apple's beta version of Xcode and teach the team

## LEADERSHIP EXPERIENCE

## Dorm Room Fund | Managing Partner

Aug 2015 – Present

- Manage a \$500,000 student-run VC fund and invest increments of \$20,000 into student-run startups in the Bay Area
- Lead a team of 9 people and responsible for sourcing deal flow, evaluating startups, and running weekly pitch meetings

# Startup at Berkeley | Event Organizer

Apr 2015 – Dec 2015

- Planned an entrepreneurial event starring the CEO of Uber, Travis Kalanick, and managed 25 volunteers and 6 presenters
- Co-led an event with 7 Cal founders including the founders of Sun Microsystems, Siri, Twitch, and Oculus VR

#### UC Berkeley | Teaching Assistant, Entrepreneurship Challenge Lab

Jan 2015 – May 2015

· Led class discussions about entrepreneurship and provided critical feedback to startup teams in office hours

### SOFTWARE PROJECTS

#### Multi-Layer Neural Network

Oct 2016 - Nov 2016

- Implemented a 3-layer neural network that classifies handwritten digits with 98% accuracy using raw pixels as features
- Derived the stochastic gradient descent backpropogation updates for the network's weight parameters

## Pacman Artificial Intelligence Agent

Aug 2015 – Dec 2015

- · Wrote multiple AI agents that enable pacman to explore the search space, avoid ghosts, and obtain a high score
- Used CSPs, multiagent minimax, classification techniques, probabilistic inference, and reinforcement learning

# Jumping Cubes Board Game

Oct 2014 - Nov 2014

- Developed a strategic two player board game with accompanying GUI in Java
- Created an artificial intelligence that uses a minimax decision making strategy with alpha-beta pruning

## TECHNICAL STRENGTHS

Computer Languages Python, Java, Swift, C, Objective-C, JavaScript, HTML/CSS, Matlab

Tools & Frameworks Scikit-learn, Numpy, OpenMP, Apache Spark, Logisim, Built.io, Titanium, Xcode, Git