Josh Kelle

joshkelle.com github.com/jkelle

Education

The University of Texas, Austin

Overall GPA: 3.91

5-Year Integrated Bachelors & Masters, Computer Science

May 2017

Technical Skills

Proficient in: Python, Java Tools: Hadoop, Hive

Comfortable with: C/C++, HiveQL NumPy, SciPy, matplotlib

Exposure to: R, MATLAB Mesos

Experience

Apple Inc., Applied Machine Learning, Intern (Cupertino, CA)

Summer 2015

- Designed and implemented an enhanced model for product recommendations on the Apple Online Store
- Technologies: Hadoop, Hive, Python, Java

Apple Inc., iCloud Application Engineering, Intern (Cupertino, CA)

Summer 2014

- Designed and prototyped a cluster management system that auto-scales in response to resource demand
- Proposed new architecture for a specific application to make use of this new auto-scaling infrastructure

Applied Research Laboratories, Space & Geophysics Lab, Honors Scholar & Researcher (Austin, TX)

Summer 2013 – Spring 2015

- Implemented and evaluated new algorithms for modeling the ionosphere
- Analyzed large amounts of GPS satellite data with an emphasis on data visualization

Projects

Computer Science Educational Materials and Mentorship

Summer 2015

- Developing exercises and sample solutions to reinforce students' data structures and algorithms skills
- Meeting regularly with a student/friend to foster their growth as a computer scientist

Fifteen Puzzle Game Al

Fall 2014

- Used multiple A* searches in serial to tackle enormous state space
- · Compared different search strategies and methods of dividing the search into phases

The Pacman Projects, implement fundamental Artificial Intelligence concepts

Spring 2014

- A*, minimax, expectimax search; reinforcement learning; classification; Bayesian inference
- Won first place in the Capture the Flag tournament among other honors AI students

PolyDrop, a game for the Leap Motion Controller that won first place in a hackathon competition

Spring 2014

- Players catch falling polygons and balance them on a platform controlled with their hand
- Has over 40,000 downloads on the Airspace App Store

LetterPress Game Al

Winter 2012

- Designed effective evaluation function to assign a value to any game state
- Graphically displays best possible game states one turn into the future

Research

Intelligent Feature Extraction for Egocentric Video Classification

Fall 2014 - present

• Working with Dr. Kristen Grauman to develop a thesis in the areas of computer vision and machine learning

Selected Coursework

Graduate Autonomous Robots	Fall 2015
Honors Machine Learning and Vision	Fall 2015
Honors Statistics	Spring 2015
Honors Artificial Intelligence	Spring 2014

Awards

Winner of Compare Metrics/Leap Motion hackathon	2014
Honors Scholar of College of Natural Sciences	2013 - 2015
Honors Scholar of Cockrell School of Engineering	2013