OKL1@rice.edu

#### **EDUCATION**

Rice University, Houston, Texas Bachelor of Arts in Computer Science GPA: 3.58

Graduation May 2019

President's Honor Roll (Spring 2016)

Python, Java, Matlab, HTML, CSS, JavaScript, Bash, SQL Languages:

Frameworks/Tools: Spring/Boot, Maven, Jenkins, CloudFoundry, ActiveMQ, Tensorflow, Git, Subversion

Github: Kevin24816

#### **EXPERIENCE**

# JPMorgan & Chase

June - July 2017

• Migrated local server apps to CloudFoundry and created Jenkins project for continuous integration of app

- Created spring app that tested database connections and intelligently switched profiles to fit different deployment environments
- Implemented new password retrieval system in apps and debugged code in restricted server environments
- Recorded documentation on various internal JPMC APIs

# Hierarchy-Based Machine Learning Research, Rice University

January - May 2016

- Researched new way of training convolutional neural networks by building a relational hierarchy of the images
- Trained model using structured back-propagation steps at each level within the hierarchy tree
- Built convolutional network using Tensorflow and used data from ImageNet

# Kaggle

- Implemented ML app that used CT lung scans to predict the presence of cancerous growth
- Set up 3-layer conv net using Tensorflow to process 3D images and output 2x1 layer
- Implemented image-preprocessing on the CT scans to eliminate excess details and sharpen images

### **Bioinformatics Intern,** Food and Drug Administration (NCTR)

June - July 2016

- Built text-mining application that extracted miRNA from a corpus of PubMed documents and used machine learning and existing medical records to understand their roles in liver regulation
- Implemented LDA topic modeling on corpus to quickly summarize a large collection of research articles
- Demonstrated app to NCTR faculty using articles from a real PubMed search result

### Hack Rice, Rice University's Hackathon

October 2016

- Conceptualized Flock, a social media app that helps college students organize travel groups for shopping/food; users create "flocks" that others join from a feed or search result
- Developed working prototype for web app
- Implemented web page that fetches search results from database and updates database when joining a flock

### **Personal and Class Projects**

- Created OS hook that extends the clipboard by adding a keyboard shortcut to list the JPMorgan contacts found in the copied text; project was formed during JPMorgan's hackathon
- Used 3rd order Viterbi algorithm to analyze a corpus of pre-tagged sentences and create a Part of Speech tagger
- Created application that aligned two genome sequences based off weights on aligning specific letter pairs
- Implemented functional APIs for lazy-lists, heap-trees, and JSON text parser
- Implemented a genetic algorithm interface that bred pictures made from trees containing mathematical functions that determined pixel colors

#### **EXTRACURICULARS**

- Performed as leading actor in Rice-organized Shakespeare play as Dromio in The Comedy of Errors
- Sailed competitively in various club events as member of Rice Sailing Club
- Performing violinist in Rice's mariachi band, Mariachi Luna Llena
- First violinist of self-organized string quartet
- Former Vice-President of Rice Video Productions