# Chandhini Grandhi

### **EDUCATION**

### **UC SAN DIEGO**

MS IN COMPUTER ENGINEERING Expected March 2020 | CA,USA

### ANNA UNIVERSITY

**BS IN ELECTRONICS** March 2016 | Chennai, India

### LINKS

Homepage://cgrandhi LinkedIn:// chandhinigrandhi

### COURSEWORK

### **GRADUATE**

Artificial Intelligence Machine Learning Recommender Systems **Embedded Computing** Data structures and Algorithms Big Data Analysis using Spark Machine Learning for Image Processing

### **UNDERGRADUATE**

Operating Systems Computer Architecture Communication Networks **Embedded Systems Object Oriented Programming** 

### SKILLS

### **LANGUAGES:**

• C • C++ • Python

### **TOOLS:**

• Visual Studio • Mercurial • JIRA • Git • LabVIFW • Linux

### **PACKAGES:**

• Numpy • Scikit-Learn • Pandas • Matplotlib

## TEACHING EXPERIENCE STOCK MARKET PREDICTION | UCSD

- Introduction to C programming
- Software Foundations I Programming
- Software Foundation II Programming in

### AREAS OF INTEREST

- Machine Learning
- Internet of Things
- Embedded Systems

### **EXPERIENCE**

### ARUBA NETWORKS, HP ENTERPRISE | SOFTWARE ENGINEERING INTERN

June 2019 - Present | Santa Clara, USA

- Developed algorithm in C that lists the columns monitored by a daemon on the switch.
- Working on developing memory profiling tools in Python for a central-database based operating system.

### **ROTORK CONTROLS** | SOFTWARE ENGINEER

July 2016 - June 2018 | Chennai, India

- Developed software in C for ARM processor to include the task of forwarding the firmware over the air.
- Developed automatic test tools in Python to automate testing and debugging process.

### **PROJECTS**

### **VISUAL QUESTION ANSWERING | UCSD**

- Built a model which when given an image and a natural language question, predicts the top five most probable answers.
- Trained a model CNN based on Resnet Architecture. LSTM and a classifier to produce final results.
- Evaluated the model on balanced and unbalanced dataset of MS COCO consisting of 204721 images and achieved an acuuracy of 61%

### **AUDIO BASED ACTIVITY RECOGNITION I UCSD**

- Trained Random Forest model on Raspberry Pi to predict the activities done by
- Collected the data using Microphone, extracted features like MFCC, Delta, DDelta and fed it to the model.
- Implemented multithreading on Rpi, to record the audio and to run the ML algorithm simultaneously.

### PREDICTING OUTCOME OF TENNIS MATCHES | UCSD

- Built a model that predicts the outcome of tennis matches.
- Analyzed and engineered the predictive features from the dataset.
- Trained using different models such as Logistic Regression, Support Vector Machine, Convolutional Neural Networks, Random forest with the best accuracy of 73.56% in Python.

- Modeled a predictor that predicts stock market as linear combination of three preceding indices.
- Trained the model using Linear Regression and obtained an MSE of 1.18 in Python.

### **AUTOMATIC SPEECH RECOGNITION | UCSD**

- Built a simple model to decode English sentence from 325000 non-text observations.
- Used forward-Backward algorithm to find the most probable sequence of hidden state in Python.