Chandhini Grandhi

cgrandhi@ucsd.edu | 858.205.2535 | cgrandhi

EDUCATION

UC SAN DIEGO
MS in Computer Engineering
Expected June 2020 | CA,USA

ANNA UNIVERSITY
BS in Electronics
March 2016 | Chennai, India

LINKS

Homepage:// **cgrandhi**
LinkedIn:// **chandhinigrandhi**

COURSEWORK

GRADUATE
Artificial Intelligence
Machine Learning
Learning Algorithms
Embedded Computing
Data structures and Algorithms

UNDERGRADUATE
Operating Systems
Computer Architecture
Communication Networks
Embedded Systems
Object Oriented Programming
Digital Communication

SKILLS

LANGUAGES:
• C • C++ • Python

TOOLS:
• Visual Studio • Mercurial • JIRA • Git • LabVIEW • Linux

PACKAGES:
• Numpy • Scikit-Learn • Pandas • Matplotlib

PROTOCOLS:
• CAN • Modbus • Bluetooth

TEACHING EXPERIENCE

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

AREAS OF INTEREST

• Machine Learning
• Internet of Things
• Embedded Systems
• Artificial Intelligence

EXPERIENCE

ARUBA NETWORKS, HP ENTERPRISE | Software Engineering Intern
June 2019 - Present | Santa Clara, USA

- Working as a part of the R&D team that works on Software for Campus Switching.
- Developing efficient algorithms in C for the central database of an custom-operating system.

ROTORK CONTROLS | Embedded 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

AUDIO BASED ACTIVITY RECOGNITION | UCSD

- Trained Random Forest model on Raspberry Pi to predict the activities done by a person.
- 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.

STOCK MARKET PREDICTION | UCSD

- 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.

PURCHASE PREDICTION BASED ON AMAZON REVIEWS | UCSD

- Built a model based on Cosine Similarity to predict the purchase of item based on popularity with an accuracy of 65%

FIRMWARE FORWARDING | Rotork Controls

- Developed and maintained firmware in C to transmit the common communication stack riding on CAN and Bluetooth.
- Developed scripts in Python for efficient debugging of chunks of data.