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EDUCATION

CARNEGIE MELLON UNIVERSITY

BS IN ELECTRICAL AND COMPUTER ENGINEERING

MINOR IN COMPUTER SCIENCE Expected May 2020 | Pittsburgh, PA College of Engineering

METHACTON HIGH SCHOOL

Grad. May 2016 | Collegeville, PA

LINKS

Github://lijeffrey39 LinkedIn://lijeffrey39

COURSEWORK

Probability Theory
Discrete Mathematics
Data Structures (C)
Computer Systems (C)
Embedded Systems* (C)
Database Systems (C++)
Computer Vision* (Matlab)
Signals and Systems (Matlab)
Functional Programming (SML)
Intro to Machine Learning (Python)
Structure/Design of Digital Systems (SV)
Parallel and Sequential Data Structures
(*: In Progress)

SKILLS

Experienced:

Python • Node.js • JavaScript HTML/CSS • SML/NJ

Proficient:

Swift • Android • PHP React.js • Arduino • Django SystemVerilog • Java SQL • C++ • C

INTERESTS

Machine Learning • Block Chain Full Stack • UI/UX

EXPERIENCE

WESTERN DIGITAL | SOFTWARE ENGINEERING INTERN

June 2018 - August 2018 | Bay Area, CA

- Implemented a system for more efficient integration of R&D silicon wafer operations with production wafers.
- Built a REST API to connect the interface to a PHP backend, which preprocessed and pipelined the data into the model.
- Used Tensorflow to leverage this data and create a Boosted Tree Model for predicting ETA of the completion of R&D wafer requests.

ARTICULAB | Software Engineering Intern

May 2017 - September 2017 | Pittsburgh, PA

- Developed the interface for a rapport-building virtual math tutor. Tested the algebra interface with over 30 students.
- Focused on full stack development by integrating the virtual tutor with a dialogue system and SVM learner model. Used Node.js for the back-end with React and D3.js for the front-end.
- Developed and tested methods for crowd-sourced dialogue annotation by using Amazon Mechanical Turk to be used as training data.

WIRELESS SHAPE-AWARE WORLD USING PASSIVE RFIDS

Research Intern | Fall 2018 | Pittsburgh, PA

- Using inexpensive, battery-free RFID tags attached to surfaces to infer shape of surface tracked from a single-antenna RFID reader.
- Implementing algorithm that models geometric constraints between coordinates of RFID tags based on flexibility of the surface.

PROJECTS

HQTRIVIABOT 2018

- Developed an algorithm/web application for predicting answers to trivia questions live. Implemented using Node.js, Socket.io, Google Vision, Google NLP, and Python.
- Used Doc2Vec to measure the cosine similarity between question and answer search results for more accurate results

DINEXCHANGE 2018

• Developing a marketplace for college students to buy and sell dining dollars. Built using a Node.js back-end with Firebase as the database.

ORGANIZATIONS

STUDENT SENATE 2018

• Represented the undergrad student body in topics such as allocation of student activity fees or pushing for academic policy changes.

LUNAR GALA 2017

• Photographer for the largest fashion event in Pittsburgh. Responsible for documenting all the producers, models, and designers in preparation for the event.