COREY KARNEI

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EDUCATION

The University of Texas at Austin

Masters of Science, DICE (Decision, Information, and Communications Engineering)

May 2022 May 2021

Bachelor of Science, Electrical and Computer Engineering Business Minor, Business Foundations

Electrical Engineering Honors Program

Overall GPA: 3.6

ADDITIONAL INFORMATION & SKILLS

Programming Languages: Python, Java, C/C++, HTML, JavaScript, CSS, Verilog

Relevant Completed Coursework: Data Science Principles, Data Science Lab, Algorithms, Software Design I, II, & III

Software: TensorFlow, PyTorch, AWS, Git, MS Office, Autodesk Inventor, LabView

Machines: Oscilloscopes, Signal Generators, Milling, Soldering, 3D Printing

Work Eligibility: Eligible to work in the U.S with no restrictions

ACADEMIC PROJECTS

Data Science Lab - Disease Detection in Human Eyes

Fall 2020

- Trained several Convolutional Neural Networks to classify diseases based on images of the eye
- Complied a dataset containing 6 diseases and over 5,500 fundus photos of retinas
- Achieved >95% accuracy when predicting each disease class individually, and >87% in a multiclass setting

Activity Sensing - Tracking Medication Adherence Project

Fall 2020

- Created a prototype smart pill-bottle that uses cameras and inertial sensors to detect pill-taking moments
- Implemented Convolutional Neural Network and Random Forest models on the video and inertial data respectively
- Winner of the 'Best Final Project' Award

WORK EXPERIENCE

UT Center for Transportation Research - Research Intern; Austin, TX

Fall 2020

- Predicted pavement quality in Python by performing linear regression on tabular data
- Wrote Loss Functions for isolating the joints between slabs of pavement

MindMesh Tech - Data Science Intern; Houston, TX

Sumer 2020

- Performed linear and nonlinear regression using Python to predict the lifespan of oil drilling tools
- Tested and Identified bugs in MindMesh's flagship software

LEADERSHIP EXPERIENCE AND ACTIVITIES

Theta Tau Engineering Fraternity - *Active Member*

Spring 2020

- Voted treasurer of our pledge class by my peers
- Oversaw fundraising events and approved budget for our Pledge Party

McCombs Summer Institute - 9 Week Intensive Business Minor Program

Summer 2019

- Completed five business courses including: Accounting, Finance, Management, Marketing, and Entrepreneurship
- Competed on a team of my peers against the rest of the program in running a simulated business
- Led my team to being 1st in overall score, market share, and financial performance as company President

Study Abroad Maymester - Milan, Italy

Summer 2018

- Studied Engineering Communications and U.S. Government while also traveling the country on weekends
- Collaborated with peers on a 10-page paper about applications of highly transformative technologies

Business Professionals of America - State Qualifier in Two events

Spring 2017

- Website Design Team: 1st in District and 11th in State
- Computer Security Test: 3rd in District and advanced to State