COREY KARNEI

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EDUCATION

The University of Texas at Austin	Masters of Science, DICE (Decision, Information, and Communications Engineering)	May 2022
	Bachelor of Science, Electrical and Computer Engineering	May 2021
	Business Minor	
	Electrical Engineering Honors Program	
	Overall GPA: 3.6	

SKILLS

Programming Languages: Python, Java, C/C++, HTML, JavaScript, CSS, Verilog
Relevant Courses: Data Science Principles, Data Science Lab, Activity Recognition, 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 out of 12 teams

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*   Summer 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
- Co-Chair on the Brotherhood Committee
- Voted treasurer of pledge class by my peers

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