Kobee Raveendran

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EDUCATION

University of Central Florida

Orlando, FL

M.S. in Computer Science, Concentration in Machine Learning

Aug. 2020 - Dec. 2021

University of Central Florida

Orlando, FL

B.S. in Computer Science, Mathematics Minor, GPA: 3.83/4.00

Aug. 2016 - May 2020

EXPERIENCE

Major League Hacking

Remote

Software Engineering Fellow

Oct. 2020 - Dec. 2020

- Selected as one of 160 out of 10,000+ applicants for the Fall 2020 cohort of the MLH Fellowship, in a pod sponsored by the U.S. Department of Defense
- Developing an NLP-based learning solution for members of the U.S. Navy to practice voice commands and evaluate their performance

University of Central Florida

Orlando, FL

Researcher at the Connected and Autonomous Vehicles Research Lab (CAVREL)

Jan. 2020 - Aug. 2020

- Worked under Dr. Yaser Fallah and the PhD students in CAVREL on the perception (lane-finding, 3D object detection) components of connected self-driving vehicles.

University of Florida

Gainesville, FL

Researcher at the NanoScape Lab, UF SURF Program

May 2019 – Aug. 2019

- Worked under Dr. Swarup Bhunia and Prabuddha Chakraborty to develop and improve on a novel image compression algorithm using machine learning for triangulation acceleration via point prediction.
- ML model development and testing was done in Python using Keras for prototyping, and color quantization and dequantization methods were implemented in C++.

The Walt Disney Company

Orlando, FL

Machine Learning Engineer Intern

Jan. 2019 – May 2019

- Researched and implemented components of a machine learning model for predicting user interest in products using a corpus of product descriptions.
- Tested, demonstrated, and reviewed the viability of new machine learning tools for approval of use within Walt Disney Parks and Resorts (WDPR).
- Developed tools for tokenization and user authentication into WDPR using Python and JavaScript.

SKILLS

LANGUAGES

• ML Development: PyTorch, Keras, TensorFlow

 Data Science: NumPy, pandas, scikit-learn, matplotlib, spaCy

• Web Development: Flask, React

• Mobile Development: Android Studio

• Software Engineering: Git, UNIX command line

• Python: Advanced

• C++: Intermediate

• JavaScript: Intermediate

• Java: Intermediate

PROJECTS

You can view more of my projects and the source code of public projects by viewing my Github 1	repositories.
 Headstone Photo Processing System – Electron, React, Redux, SQLite, TensorFlow Desktop application made to extract visually-challenging text from headstone images and match each image to an entry in a cemetery database. Consisted of components such as flexible text extraction via AttentionOCR, automatic headstone cropping and rotation detection (with correction). 	2019 - 2020
 Intelligent Voice Learning Tutor – Python, React Native (in-progress) Desktop and mobile app designed to help members of the Navy learn and practice voice commands. Will include performance evaluation and guided progression through a curriculum set by Naval instructors. 	2020
 Faster Pix2Pix – Python, PyTorch Training speed-oriented improvement on Philip Isola et. al's cGAN-based Pix2Pix network for conditional image-to-image translation. 	2018
• CheersM8.tk – JavaScript, ReactJS Dead simple, room-based group video chat web application. Supports up to 4 people per room.	2020
 Curved Lane Finding – Python, cv2 General pipeline using foundational computer vision techniques for identifying and labeling lane lines, lane curvature, and vehicle offset. 	2020
Youtube2MP3 – Python • Desktop application written in Python that converts YouTube videos or entire playlists into MP3 files.	2018
Scholarships and Awards	
National Merit Scholarship Award	2016 - 2020
• Benacquisto Scholarship	2016 - 2020
• Bright Futures Academic Scholar (FAS)	2016 - 2023
• Bright Futures Academic Top Scholar Awarded to the student ranked highest academically in each county, in addition to the FAS	2016 - 2020
• UCF President's Honor Roll	2017 - 202
• CECS Dean's List	2017 - 2020
• International Baccalaureate Diploma	2016
Organizations and Extracurricular Activities	
• Fellow at Major League Hacking Working on software projects sponsored by the U.S. Department of Defense for the Tour of Duty progra	2020 am.
• Member of SIGAI@UCF Applied exploration of foundational and recent approaches in various subfields of artificial intelligence.	2018
Member of HACK@UCF Weekly dive into fun cybersecurity-related topics, accompanied by live demos and walkthroughs.	2016 - 2018
• Member of the Burnett Honors College at UCF	2016 - 2019