

Kobee Raveendran

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EDUCATION

University of Central Florida

M.S. in Computer Science, Concentration in Machine Learning, GPA: 4.00/4.00

Orlando, FL

Aug. 2020 – Dec. 2021

University of Central Florida

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

Orlando, FL

Aug. 2016 – May 2020

EXPERIENCE

Microsoft

Software Engineer Intern

Redmond, WA

May 2021 - Aug. 2021

- Working on a confidential feature for a future Windows release on the SigX PC2 team. WDX group, Windows & Devices Org @ Microsoft

Major League Hacking

Software Engineering Fellow

Remote

Oct. 2020 – Dec. 2020

- Developing an NLP-based learning solution for members of the U.S. Navy to practice voice commands and evaluate their performance
- Responsible for part of the frontend (React) implementation, and much of the speech transcription, performance evaluation, and scoring components of the app

University of Central Florida

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

Orlando, FL

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

Researcher at the NanoScape Lab, UF SURF Program

Gainesville, FL

May 2019 – Aug. 2019

- Worked under Dr. Swarup Bhunia and Prabhuddha Chakraborty to develop and improve on a novel image compression algorithm using machine learning for predicting Delaunay triangulation points, and quantization for discretizing colors in an image
- 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

Machine Learning Engineer Intern

Orlando, FL

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

- **ML Development:** PyTorch, Keras, TensorFlow
- **Data Science:** NumPy, pandas, scikit-learn, matplotlib, spaCy
- **Web Development:** Flask, React

- **Mobile Development:** Android Studio

LANGUAGES

- **Python:** Advanced
- **C++:** Intermediate
- **JavaScript:** Intermediate
- **Java:** Intermediate
- **Software Engineering:** Git, UNIX command line

PROJECTS

You can view more of my projects and the source code of public projects by viewing my [Github repositories](#).

- **Headstone Photo Processing System** – Electron, React, Redux, SQLite, TensorFlow 2019 – 2020
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).
- **NavySpeak** – React Native, Expo, TypeScript 2020
Cross-platform app designed to help members of the U.S. Navy learn and practice spoken commands for a variety of on-the-job scenarios. Includes automatic performance evaluation and guided progression through a curriculum set by naval instructors.
- **Faster Pix2Pix** – Python, PyTorch 2018
Training speed-oriented improvement on Philip Isola et. al's cGAN-based Pix2Pix network for conditional image-to-image translation.
- **CheersM8.tk** – JavaScript, ReactJS 2020
Dead simple, room-based group video chat web application. Supports up to 4 people per room.
- **Curved Lane Finding** – Python, cv2 2020
General pipeline using foundational computer vision techniques for identifying and labeling lane lines, lane curvature, and vehicle offset.
- **Youtube2MP3** – Python 2018
Desktop application written in Python that converts YouTube videos or entire playlists into MP3 files.

SCHOLARSHIPS AND AWARDS

- National Merit Scholarship Award 2016 – 2020
- Benacquisto Scholarship 2016 – 2020
- Bright Futures Academic Scholar (FAS) 2016 – 2021
- Bright Futures Academic Top Scholar 2016 – 2020
Awarded to the student ranked highest academically in each county, in addition to the FAS
- UCF President's Honor Roll 2017 – 2020
- CECS Dean's List 2017 – 2020
- International Baccalaureate Diploma 2016

ORGANIZATIONS AND EXTRACURRICULAR ACTIVITIES

- Fellow at Major League Hacking 2020
Working on software projects sponsored by the U.S. Department of Defense for the Tour of Duty program.
- Member of SIGAI@UCF 2018
Applied exploration of foundational and recent approaches in various subfields of artificial intelligence.
- Member of HACK@UCF 2016 – 2018
Weekly dive into fun cybersecurity-related topics, accompanied by live demos and walkthroughs.
- Member of the Burnett Honors College at UCF 2016 – 2019