

Kobee Raveendran

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EDUCATION

University of Central Florida

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

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

Major League Hacking

Software Engineering Fellow

Remote

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

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 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

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, Django, React
- **Mobile Development:** Android Studio
- **Software Engineering:** Git, UNIX command line

LANGUAGES

- **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 repositories](#).

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|--|-------------|
| Headstone Photo Processing System (HHPSv2) – Electron, ReactJS, TensorFlow | 2019 – 2020 |
| Desktop application made to extract visually-challenging text from headstone images and | |
| <ul style="list-style-type: none">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). | |
| Intelligent Voice Learning Tutor – Python, React Native (in-progress) | 2020 |
| Desktop and mobile app designed to help members of the Navy learn and practice | |
| <ul style="list-style-type: none">voice commands. Will include performance evaluation and guided progression through a curriculum set by Naval instructors. | |
| Faster Pix2Pix – Python, PyTorch | 2018 |
| <ul style="list-style-type: none">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 |
| <ul style="list-style-type: none">Dead simple, room-based group video chat web application. Supports up to 4 people per room. | |
| Curved Lane Finding – Python, cv2 | 2020 |
| <ul style="list-style-type: none">General pipeline using foundational computer vision techniques for identifying and labeling lane lines, lane curvature, and vehicle offset. | |
| Youtube2MP3 – Python | 2018 |
| <ul style="list-style-type: none">Desktop application written in Python that converts YouTube videos or entire playlists into MP3 files. | |

SCHOLARSHIPS AND AWARDS

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| <ul style="list-style-type: none">National Merit Scholarship Award | 2016 – 2020 |
| <ul style="list-style-type: none">Benacquisto Scholarship | 2016 – 2020 |
| <ul style="list-style-type: none">Bright Futures Academic Scholar (FAS) | 2016 – 2021 |
| <ul style="list-style-type: none">Bright Futures Academic Top Scholar | 2016 – 2020 |
| Awarded to the student ranked highest academically in each county, in addition to the FAS | |
| <ul style="list-style-type: none">UCF President's Honor Roll | 2017 – 2020 |
| <ul style="list-style-type: none">CECS Dean's List | 2017 – 2020 |
| <ul style="list-style-type: none">International Baccalaureate Diploma | 2016 |

ORGANIZATIONS AND EXTRACURRICULAR ACTIVITIES

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| <ul style="list-style-type: none">Fellow at Major League Hacking | 2020 |
| <i>Working on software projects sponsored by the U.S. Department of Defense for the Tour of Duty program.</i> | |
| <ul style="list-style-type: none">Member of SIGAI@UCF | 2018 |
| <i>Applied exploration of foundational and recent approaches in various subfields of artificial intelligence.</i> | |
| <ul style="list-style-type: none">Member of HACK@UCF | 2016 – 2018 |
| <i>Weekly dive into fun cybersecurity-related topics, accompanied by live demos and walkthroughs.</i> | |
| <ul style="list-style-type: none">Member of the Burnett Honors College at UCF | 2016 – 2019 |