Ankita Tripathi

CONTACT INFO

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Links
LinkedIn
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SKILLS

Programming Languages
Java, Python, JavaScript, C, C++, C#, SQL

Other technologies
React Native, Firebase, Google Cloud Platform, Tensorflow/Keras, OpenCV, NumPy, SciPy, Pandas, Scikit-learn, ROS

EDUCATION

University of Central Florida, Orlando, FL — August 2017 – May 2021
Bachelor of Science in Computer Science
Minors in Intelligent Robotic Systems and Cognitive Sciences
GPA: 3.66

- Honors: Dean's List (Spring 2018, Fall 2018, Fall 2019, Spring 2021), President's Honor Roll (Fall 2020)
- Relevant Coursework: Data Structures and Algorithms, Processes for Object Oriented Software Development, Computer Logic and Organization, Systems Software, Concepts of Parallel and Distributed Processing, Security in Computing, Artificial Intelligence, Robot Vision, Robotic Systems, Evolutionary Computation, Machine Learning
- Societies and Activities: AI@UCF, ACM-W, Summer Research Academy, Rewriting The Code

EXPERIENCE

Undergraduate Research Assistant — August 2020 – May 2021
Department of Biology, University of Central Florida, Orlando, FL

- Implemented a machine learning model using Keras, to classify images of native biodiversity
- Performed data collection and preprocessing, and constructed an image classification model that incorporated data augmentation and segmentation to optimize model accuracy

PROJECTS

ParaSpeech: A Speech Therapy App — August 2020 – April 2021
Capstone Project, University of Central Florida

- Built a cross-platform speech therapy mobile application for aphasia patients, using React Native and Firebase
- Implemented a scoring algorithm that grades the user on their speech therapy practice, using lip recognition via TensorFlow.js and OpenCV libraries

Concurrent Hash Table — February 2021 – April 2021
Concepts of Parallel and Distributed Processing, University of Central Florida

- Created a custom hash table data structure that utilizes a concurrent level hashing scheme and binary search tree buckets, to enable multithreaded access for search, insertion, and deletion operations
- Combined concepts from multiple existing research projects to design the structure of the hash table

BERT Product Rating Predictor — September 2020 – December 2020
Machine Learning, University of Central Florida

- Developed a rating predictor for products listed in the "Electronics" category on Amazon, using textual product reviews and the BERT model for Natural Language Processing
- Performed data preprocessing, model training, testing, cluster analysis, and human vs model intuitiveness evaluations

Coevolutionary Genetic Algorithm — April 2020
Evolutionary Computation, University of Central Florida

- Implemented a genetic algorithm in Java that uses coevolution as a strategy for multi-objective optimization
- Explored the effects of varying parameter values on the evolution of two populations for a bi-objective knapsack problem