

# Ankita Tripathi

## CONTACT INFO

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### Links

[LinkedIn](#)

[GitHub](#)

[Website](#)

## 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