Aviral Choudhary

240-755-5977, aviral@umd.edu, https://www.linkedin.com/in/aviral-choudhary/

EDUCATION

UNIVERSITY OF MARYLAND   **College Park, Maryland**

Bachelors Computer Science and Mathematics, Expected Graduation, December 2021   *GPA :3.65*

Selected Coursework: Machine Learning, Adv. Data Structures (TA), Algorithms, Distributed Computing, Adv. Calculus, Computer Vision, Programming Languages, Computer Systems (TA), Applied Probability & Statistics

WORK EXPERIENCE

Reality AI   **Columbia, Maryland**
Software Engineer Intern | Cloud Team   *June 2021 – Aug 2021*
- Implemented functionality to simplify and reduce the data engineering pipeline
- Streamlined data conversion between Python & Matlab to save storage by 50% and engineer more precise data models
- Refactored codebase, formulated regression tests, and set up GitHub workflow to support future updates

IDEA 258U: UI/UX Design   **College Park, Maryland**
Student Course Instructor   *Jan 2021 - May 2021*
- Designed and taught a 1 credit student led course at University of Maryland, College Park
- Facilitated discussion between 22 students to understand topics like Human Centered Design, Empathy Maps, Ideation, Wireframing, User-Centric Design, Prototyping

Reality AI   **Columbia, Maryland**
Machine Learning Intern | AI Team   *Dec 2020 – May 2021*
- Visualized complex audio data sets, drew conclusions, and suggested different feature spaces to use in feature extraction
- Analyzed motion data and embedded machine learning model in system on chip to predict heartbeat with 95% accuracy
- Engineered a data pipeline to capture, clean, and explore time-series data from multiple sources in parallel

SpringGem Weather   **North Potomac, Maryland**
App Development Intern | Mobile & Web Dev. Team   *June 2020 – Dec 2020*
- Developed and published a cross-platform mobile application for navigation in dangerous conditions with React Native
- Scraped, tidied, and analyzed weather data from 72 weather stations to predict hazardous road conditions
- Utilized cronjobs to automate data collect and product usage statistics and made graphs to visualize weather shifts

Department of Computer Science   **College Park, Maryland**
Undergraduate Teaching Assistant   *Aug 2019 – Aug 2020*
- Guided group discussions and graded projects, quizzes, and exams for over 200 students across 3 different courses (Data Structures (Java), Computer Systems (C), Intro. to Programming (Java))

PROJECTS

- Pearish
  - Tech Stack: JavaScript, Python, OCR
  - Developed an application to help users in keeping track of expiry dates of perishable food items
- DankTanks.IO (deployed on Heroku at http://danktanks.io/)
  - Tech Stack: JavaScript, HTML, CSS
  - An online browser-based, lightweight, real time multiplayer tank battleground
- Panorama Image Stitching
  - Tech Stack: Python, OCR
  - Stitched multiple images seamlessly to create a panorama image
- Analysis of Airbnb and Crime Rate
  - Tech Stack: Python, Sklearn, Juytper
  - Scrapped 33,000 listings from the Airbnb website to use as data points to explore how different factorslike crime rate affect price of a listing
- Navigation App
  - Data structures: AVL, Red-Black, and PM-Quad Trees
  - Implemented a Java backend for a world map supporting navigation

SKILLS

- Java, C, Python, R, JavaScript & Frameworks, Figma,MATLAB, Ruby, HTML, CSS, Flask, Node.js, React.js, SQL, Git, Django, UNIX, React Native, SAS, Data Analysis and Viz., Testing (Jest, Junit)