# Aarush Chaubey | Résumé

# **Education**

#### University of California Berkeley

Department of Electrical Engineering and Computer Science

August 2024 – May 2028 B.A. Computer Science

## Programming Experience:

Java, C++, LATEX, Python (also NumPy/TensorFlow/Keras), HTML/CSS, Scheme

# **Select Projects**

### Computer Programming

## [Internship] United States Army 2024 — Keras/OpenCV/NumPy:

- Currently designing a Region-based Convolutional Neural Network(R-CNN) to aid in fast-paced medical situations
- Distinguishing Northern, Southern, Northeastern, Northwestern Indian faces for precision medicine uses
- Fully funded by the Army Research Office (ARO) Reference: Dr. Col. Jerry Miller

## [Internship] United States Army 2023 — Tensorflow/OpenCV/NumPy:

- Designed and implemented a Convolutional Neural Network(CNN) to detect missing persons from aerial cameras
- Achieved 98% accuracy in person detection
- Network analyzed Unmanned Aerial Vehicle Forward Looking Infrared (FLIR) images
- Fully funded by the Army Research Office (ARO) Reference: Dr. Col. Jerry Miller

#### Library Locator Website — ArcGIS/HTML/CSS:

- Built a website that compares library necessity to current library locations in order to inspire library construction throughout the Miami-Dade area
- Mapped all 50 libraries in Miami-Dade county using ArcGIS, resulting in over 70% of Miami-Dade not being covered by libraries
- Nominated for Miami Herald Silver Knights award for this project

# **Awards/Honors**

1st Place Statewide (250+ Competitors): Lockheed Martin CodeQuest

**2nd Place Statewide (230+ Competitors)**: University of Central Florida High School Programming Tournament

**1st Place Statewide (100+ Competitors)**: University of Florida High School Programming Competition

AIME Qualifer: Top 2.5% of worldwide competitors with a score of 7

# **Select Work Experience**

#### Berkeley Math Tournament: Calculus Test-Organizer

September 2024 - Present

- Lead and oversee team of problem-writers, working together to make challenging problems, coordinate "test-solves", and place problems accurately
- $\circ$  Writing dozens of high-level algebra, geometry, and calculus problems for  $\sim$  2000 high school students