## ANMOL RATTAN SINGH SANDHU

anmol.dev | +1-510-999-2365 | asandhu@olin.edu

#### **EDUCATION**

- Olin College of Engineering / Bachelor of Science in Computer Science Needham, MA | May 2025
  - Relevant Coursework: Software Design, Data Structures and Algorithms, Software Systems, Advanced Algorithms
- Advanced Courses/ Representations
  - o Azure Cloud Fundamentals, Microsoft AZ-900
  - o Summer Program with AwesomeMath, Cornell University
  - o Foundational Course on Platforms, The Platform Institute, Singapore
  - o National level Workshop on AI (AI•Thon) conducted in collaboration with Intel

#### SKILLS

- Python, Go, C, C++, C#, JavaScript, Node.js, Java, Dart
- Git, Unity, React, MATLAB, Flutter, SolidWorks
- Fluent in Hindi and Punjabi

#### **EXPERIENCE**

### • Researcher, Olin College Crowdsourcing and Machine Learning Lab

Feb 2022 - Present

- O Created pipeline to benchmark image matching algorithms on data collected from 50+ co-designers for the Clew app, which is a path retracing app for blind and visually impaired users.
- o Added Protobuf support for data logging using Firebase for the Clew iOS application.
- Used Python to develop infrastructure to benchmark various algorithms including neural networks like SuperGlue and OpenCV algorithms on different image matching techniques.
- Currently working on a visual Simultaneous Localization and Mapping (SLAM) system to allow continuous re-alignment during navigation.

### Coding Team Lead, Public Interest Technologies, Olin College

Dec 2021 – Present

- O Developing 2D exploration role-playing game to teach young kids about gender identities in collaboration with the non-profit Out Maine.
- Onboarded team of students to Unity game development and project collaboration on GitHub.
- Led coding team design reviews with Out Maine liaisons and mentor professors.
- Learned skills in prototyping mechanisms and writing scalable code for different game components.

# Intern, DronaMaps (<u>medium.com/dronamaps</u>)

Punjab, India | Feb 2021-June 2021

- DronaMaps is a Command-and-Control Center solution built on a backend of 3D drone maps.
- Assisted with time-series analysis of hot spots to help the government plan its infrastructure for dealing with Covid-19 using analytical tools like R and ArcGIS.

#### • STEM Scholar, Jr Academy, NY Academy of Sciences

Aug 2017 - Present

 Collaborated with peers from other countries on global challenges like Big Data, Future of Cities and COVID-19. Our team was adjudged as one of the two global finalists for combating COVID-19.

### Volunteer, EcoSikh Foundation

Punjab, India | July 2018 - Present

- Trained more than 120 young volunteers, over a period of three years, as a master trainer for "train the trainer" program for nurturing micro-forests in their schools or backyards
- Assisting the senior team to create technology led solution to identify and categorize the native plants and create their seed bank.