ANMOL RATTAN SINGH SANDHU

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SKILLS

- Skills: Python, Go, JavaScript, Unity, Java, Git, MATLAB
- Exposures: C++, React, Node.js, Flutter, Dart, SolidWorks, Machine shop, laser cutting, 3D printing
- Languages fluent: Hindi and Punjabi

EDUCATION

• Olin College / Bachelor of Science in Computer Science

Needham, MA | May 2025

- o Recipient of 50% tuition scholarship
- Relevant Coursework: Software Design, Data Structures and Algorithms, Introduction to Sensors, Instrumentation and Measurement.

• Advanced Courses/ Representations/ Representations

- 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

EXPERIENCE

• Researcher, Olin College Crowdsourcing and Machine Learning Lab

Feb 2022 - Present

- 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.
- Developed 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

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

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

Punjab, India | Feb 2021-June 2021

- o 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.