# Joyce Passananti | https://joyce-passananti.github.io/ | joycepassananti@ucsb.edu | 425-785-0558

## EDUCATION

**University of California Santa Barbara** | PhD in Computer Science (Human Computer Interaction)  **Expected June 2027**
**The University of Chicago** | BS in Computer Science, BA in Media Art and Design | GPA: 3.7  **June 2022**

## SKILLS

*Programming Languages:* C++ • C# • Java • Python • Typescript • Javascript • HTML • CSS
*Development Tools:* Unity • React/React Native • Redux • AFrame • 3.JS • Expo • Git • Blender • Fusion360 • HoloLens + MagicLeap Development
*Art & Design:* RunwayML • Adobe Illustrator/Photoshop • Experienced with Laser Cutters, 3D Printers, CNC Machines & Software

## AWARDS & ACCOMPLISHMENTS

University of Chicago Dean's List • National Merit Scholar • AP Scholar with Distinction
**Awarded Metcalf Grant + UChicago Green Fund Grant for Research in HCI**
**Hackathon Winner: Best Social Good Hack | Venus Hacks 2021**
· Global Goals uses Phaser, Python Flask, SQLite, and Pixel Studio to create a full stack web browser game with custom graphics.
· Encourages social activism through a community-oriented app that enables players to grow an oasis of animals by engaging in justice work.

## RESEARCH

**University of California Santa Barbara Four Eyes Lab** | *Graduate Student Researcher*  **Sept 2022 - Present**
· Currently developing a user study on the MagicLeap + EEG headset using Unity to explore the relationship between eye tracking + brain  signals.
· Level-of-Detail AR (2nd author) paper conditionally accepted to IEEE Conference 2023: applies concept of responsive web design to mixed reality. Dynamically adapts content of AR applications to efficiently display information on available screen estate + increase performance + satisfaction.
**University of Chicago HCI Lab** | *Research Assistant*  **Dec 2020 – Jun 2022**
· Worked on ThermalRouter, a program enabling CAD novices and hobbyists to design thermally sound devices with the aid of our Fusion360 add-on that culminated in a research paper submitted to CHI 2022.  I worked on the design and implementation of this feature which involved extensive python scripting and use of the Fusion360 API, then proceeded to run and analyze a user study to draw conclusions for our paper.
· Worked on EcoEDA, an open-source tool/resource-library to facilitate reuse of electronic components in designing new devices + reduce e-waste.
**University of Chicago SAND Lab** | *Research Assistant*  **Dec 2021 – Jun 2022**
· Research assistant studying ways in which adversarial ML can be used to generate digital protection patterns and implemented through wearable devices to protect against facial recognition by unauthorized software.
**University of Chicago Critical Computation Lab**| *Research Assistant*  **Dec 2020 – Jun 2021**
· Worked as a research assistant under Prof. Jason Salavon in his Critical Computation lab exploring the intersection of Machine Learning and Art.
· Responsibilities included developing his website to be accessible on mobile devices; I primarily used Django, MySQL, and Python.

## WORK EXPERIENCE & LEADERSHIP

**Microsoft** | *Software Engineer Intern*  **Jun – Sep 2021**
· Worked on the Start Experiences team in collaboration with the Esports team to design and implement the Esports Tournament Card for MSNews. Was the key point of contact across teams - managed communication and built connections.
· Responsibilities consisted of using the React-Redux library with typescript to build the UI and experience for the Esports Tournament feature.
**Microsoft** | *Explore Intern*  **Jun – Sep 2020**
· Worked as a Program Management (PM) and Software Engineering (SWE) Intern to design and build the YouTube and Twitter Smartlist features.
· PM Responsibilities included extensive user research on pre-existing features/user preferences, a focus on user retention and customer satisfaction, and developing a comprehensive spec document detailing every requirement and accessibility consideration for our feature.
· SWE responsibilities consisted of using the React-Redux library with typescript and integrating the Google API to build the UI and experience.
**Polsky Center Fabrication Lab** | *Intern*  **Sep 2019 – Apr 2020**
· I worked with members to create their ideas through digital fabrication and prototyping. I assisted in operating the lab and teaching equipment/software training classes to members (specifically Adobe Illustrator, the Laser Cutter, 3D printers, Shopbot, CAD and CNC software).
**DigiPen Institute of Technology** | *Lead Programming Instructor*  **Jun – Aug 2019**
· I worked at DigiPen Institute of Technology as a Lead Teacher for their ProjectFun courses offered to students in elementary, middle, and high school. I designed and taught one- and two-week-long courses in programming and logic to students at various levels in both C and Javascript.
**Microsoft Research** | *Software Engineer Intern*  **Jun – Sep 2017**
· I worked for 10 weeks in the ML & AI team at Microsoft Research on a project to make machine teaching more accessible to everyone, not just to machine learning experts. We developed an app that allows users to easily create and train their own machine learning model to classify their data. Performed a competitive analysis of services already available and developed a mobile application using Expo, React Native, and Typescript
**UChicago Science Olympiad Team** | *President, Board Member*  **Sep 2018 – Jun 2022**
· We volunteer to run Invitational Science Olympiad competitions at a national level and host workshops to educate interested students in STEM.
· Responsibilities included significant team management, community outreach for partnerships + funding, fundraiser organization, and leadership.