Joyce Passananti | https://joyce-passananti.website | joycepassananti@ucsb.edu | (+1) 425-785-0558

EDUCATION

University of California Santa Barbara | PhD in Computer Science (HCI)   **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 • AFrame • Expo • Git • Rhino + Grasshopper • Blender • Fusion360 • Adobe Illustrator • HoloLens, MagicLeap
Art & Design: RunwayML • Adobe Illustrator/Photoshop • Experienced with Laser Cutters, 3D Printers, CNC Machines & Software

AWARDS & FELLOWSHIPS

UCSB Graduate Research Mentorship Program Fellowship 2023-2024
UCSB Academic Excellence Fellowship 2022-2023
Awarded Metcalf Grant + UChicago Green Fund Grant for Research in HCI 2021-2022
University of Chicago Dean's List • National Merit Scholar • AP Scholar with Distinction
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**
· PhD Researcher advised by Prof. Tobias Hollerer in the Four Eyes Lab.
· Focus on HCI Research in Mixed Reality, Computational Fabrication, Creativity Support.

University of Chicago HCI Lab | *Research Assistant*   **Dec 2020 – Jun 2022**
· Undergraduate Research advised by Prof. Pedro Lopes in the Human Computer Interaction Lab.
· Focus on HCI Research in CAD workflow design and electronics recycling + minimizing 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**
· 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.

PUBLICATIONS

Joyce Passananti, Ana Cardenas, Jennifer Jacobs, Tobias Hollerer 2023. [Demo] SculptAR: Direct Manipulations of Machine Toolpaths in Augmented Reality for 3D Clay Printing. In Extended Abstracts of *User Interface Software and Technology (UIST) 2023*

A. Wysopal, V. Ross, **J. Passananti**, K. Yu, B. Huynh and T. Hollerer 20223. Level-of-Detail AR: Dynamically Adjusting Augmented Reality Level of Detail Based on Visual Angle. In Proceedings of *IEEE Conference Virtual Reality and 3D User Interfaces (IEEE VR) 2023*

Alex Mazursky, Borui Li, Shan-Yuan Teng, Dasha Shifrina, **Joyce Passananti**, Svitlana Midianko, Pedro Lopes 2023. ThermalRouter: Enabling Users to Design Thermally-Sound Devices. In Proceedings of *User Interface Software and Technology (UIST) 2023*

Jasmine Lu, Beza Desta, K. D. Wu, Romain Nith, **Joyce Passananti**, Pedro Lopes 2023. ecoEDA: Recycling E-waste During Electronics Design. In Proceedings of *User Interface Software and Technology (UIST) 2023*

WORK EXPERIENCE

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 and Software Engineering 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**

· 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 <u>Laser Cutter</u>, <u>3D printers,</u> <u>Shopbot</u>, <u>CAD</u> and <u>CNC software</u>).

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 <u>mobile application</u> using <u>Expo</u>, <u>React Native</u>, and <u>Typescript.</u>

TEACHING + LEADERSHIP

DigiPen Institute of Technology | *Lead Programming Instructor*   **Jun – Aug 2019**

· I taught 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 <u>C</u> and <u>Javascript</u>.

UChicago Science Olympiad Team | *President, Board Member*   **Sep 2018 – Jun 2022**

· Organized 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.