

# Ava M. Robinson

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Software engineer with experience designing, developing, and researching novel products including augmented reality and mobile experiences. Passionate about creating user-first products to improve people's lives.

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## RELEVANT EXPERIENCE

**Research Engineer, Human-Computer Interaction Research Team**, Snap Inc, NYC Aug. 2021 – Aug. 2022

- Led development, design, and launch of 10 augmented reality experiences for colocated interactions; +1M users
- Prototyped the integration of IoT devices with mobile/wearable AR to create immersive storytelling experiences
- Developed iOS app to foster effortful communication using ARKit, RealityKit, and SwiftUI
- Fostered collaborations with internal and external teams to productize and distribute novel work
- Directly managed 2 interns and was tech lead on a project with 3 interns
- Published and submitted 5 papers to scientific conferences. Authored and filed 10+ patent disclosures.

**Software Development Intern**, Afterword (Startup), Remote Fall 2020 – Spring 2021

- Designed and developed frontend and backend system to support families after loss via online funeral planner

**Research Assistant - Developer**, Delta Lab, Northwestern University Fall 2020 - Winter 2021

- Developed expert system using data analysis and heuristic algorithms to detect key programming moments

**Research Engineer Intern, Human-Computer Interaction**, Snap Inc, Remote Summer 2020

- Prototyped AR experiences to enable novel in-person social interactions on Snapchat
- Conducted user study with 100 participants using contextual interviews; findings published in scientific journal

**Software Development Intern**, CureMetrix, San Diego Summer 2019

- Developed and deployed website using Django and AWS for internal tracking of mammogram analysis algorithm

**Agile Software Developer**, Agile Project Team, Northwestern University Spring 2020

- Developed web and mobile app for external client using React in agile development environment
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## SKILLS

- *Programming languages*: Python, JavaScript, SwiftUI, HTML, CSS, React, React Native, SQL
  - *Technical tools*: ARKit, RealityKit, Lens Studio (AR Dev Platform), AWS basics, Node.js, Docker basics, git
  - *Design tools*: Figma, Adobe (XD, Illustrator, Photoshop, AfterEffects), 3D modeling basics
  - *Miscellaneous*: User studies, contextual inquiry, participatory design, study analysis, intern & project management
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## EDUCATION

**Northwestern University**, Evanston, IL June 2021

B.S. in Computer Science, Segal Design Certificate, Integrated Marketing and Communications Certificate

Magna Cum Laude - GPA: 3.9/4.0

*Relevant Courses*: HCI, Algorithms, Agile Dev., UX Design, Data Structures, Systems, AI, ML, Networking

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## RELEVANT ACTIVITIES

**Women in Computing**, Northwestern University – Grace Hopper 2019 & 2020 2017 – 2021

**Teaching Assistant**, Machine Learning, Northwestern University Fall 2019

**Tau Beta Pi**, Engineering Honors Society 2020 – Present

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## PUBLICATIONS

- Project IRL: Playful Co-Located Interactions with Mobile Augmented Reality. CSCW'22.
  - An approach for detecting student perceptions of the programming experience from interaction log data. AIED'21
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## PATENTS GRANTED

- Multi-user AR experience with offline synchronization. July 12, 2022. Patent Number: 11383156.
- Colocated shared augmented reality without shared backend. June 14, 2022. Patent Number: 11360733.