Zofia Marciniak

HCI Researcher

email portfolio github zosia.m.marciniak@gmail.com zosia-hci.github.io github.com/zosiazamoyska

Connecting passion for technology and people through research in Human-Computer Interaction. Interested in creating computational tools for making.

Skills & Tools	
Design Methods	UX Research, User-Centered Design Methods, Affinity Diagram, Interactive Prototyping, Study and Workshop Moderation
Design Tools	Figma, Adobe Illustrator, front-end development Rhino, Grasshopper, Fusion 360 Arduino, Raspberry Pi, physical computing, 3D printing
Development	Python, C++, javascript, data structures, algorithms, git
Interpersonal	problem-solving, conflict resolution, team building
Language	English (fluent), Polish (fluent), Korean (intermediate)
Education	
Master's Degree	Industrial Design (MS) Korea Advanced Institute of Science and Technology August 2023 - August 2025 (expected)
Bachelor's Degree	Industrial Design and Computer Science (BS) Korea Advanced Institute of Science and Technology September 2019 - August 2023
Work Experience	
Software Engineering Intern	 NoMagic <u>nomagic.ai</u> June 2022 - September 2022 Designed a restructure of Robot Arm main thread Implemented a new feature for a Robotic Arm in Pick-and-Place solution system Supervised deployment of the implemented feature
STEP Intern	Google July 2021 - September 2021 • Developed a language parser for policy translation in Go
Research Experience	
Research Assistant	 MakeLab <u>make.kaist.ac.kr</u> August 2023 - August 2025 (ongoing) Conducting research on digitalization opportunities in crafting experience for crocheters Building a hardware and software system support Participating in research project improving productivity in VR
Undergraduate Research Intern	 MakeLab <u>make.kaist.ac.kr</u> September 2022 - August 2023 Co-authored a paper proposing fully 3D printed displays Developed a custom 3D printing slicer for parametrized texture Conducted a perception study on texture roughness perception Conducted a user study to qualitatively evaluate the slicer Wrote and published a short paper and journal article about texture slicing

Research Experience - continued

Undergraduate Research Intern	 HCI Tech Lab <u>hcitech.org</u> January 2022 - June 2022 Received a university research funding to develop this research Designed a novel haptic interaction system Built an electromagnetic, finger-worn actuator Developed vibrotactile and force feedback drivers Researched and experimented on interaction types Published a poster at an international conference
Undergraduate Research Intern	 CDSN Lab <u>cds.kaist.ac.kr</u> July 2020 - December 2020 Collected and analyzed data related to urban mobility Analyzed data to find correlation between weather and mobility Published and presented a paper at a local conference
Publications	
CHI, 2024 top venue for HCI research	3D Printing Locally Activated Visual-Displays Embedded in 3D Objects via Electrically Conductive and Thermochromic Materials Kongpyung (Justin) Moon, Zofia Marciniak , Ryo Suzuki, and Andrea Bianchi
AODR, 2024	Decoupling Geometry from Surface Finish by Parameterizing Texture Directly in G-code for Fused Deposition Modeling (FDM) Printing Zofia Marciniak, Kongpyung Moon, and Andrea Bianchi
Korea HCI, 2023	3D Printing Slicer for Computational Texture Generation Zofia Marciniak, Kongpyung Moon, and Andrea Bianchi
VRST, 2022	Guide Ring: Bidirectional Finger-worn Haptic Actuator for Rich Hap- tic Feedback (Poster) Zofia Marciniak, Seo Young Oh, and Sang Ho Yoon
Korea HCI, 2021	Understanding the impact of the Weather on Human Mobility via LTE Access Traces in Seoul Districts Zofia Marciniak, Sumin Han, and Dongman Lee
Awards/Achievements	

iF Design Award, 2024	Evergrow: Investement Education Service Mobile App: Professional Concept, Service Design Concept
URP, 2022	University Research Program Electromagnetic haptic interface for robust interaction in metaverse platform