

Loiy Qasrawi

Bloomington, IL | lqasraw@ilstu.edu

Education

Illinois State University, MS in Computer Software and Media Application **Expected May 2025**

Minor: Creative Technologies

Thesis Committee: Dr. Greg Corness (Chair), Dr. Dan Cox, Dr. Kristin Carlson

American University of Madaba, BA in Design and Visual Communication **June 2022**

Minor: Animation

Advisor: Dr. Sami Al-Tal

Research Interests

Human-computer interaction, accessible technologies, applied computer vision, inclusive design, digital environments, avatars, virtual and augmented reality, and games.

Skills

Back-end Development: C++ (Unreal Engine), C# (Unity), Swift, JavaScript, HTML, CSS

Developer Tools: GitHub, GitLab, Visual Studio Code, Xcode, Meta Quest Developer, Android Studio

Designer Tools: Maya, Blender, After Effects, Illustrator, Photoshop, Premiere Pro

Domain Knowledge: iOS Accessibility, visionOS Accessibility, Apple Vision Pro, Oculus VR

Teaching Experience

CTK 380, CTK 481 – Maya for VR Design **Normal, IL**

Graduate Teaching Assistant; *Dr Simone Downie* **Spring 2024**

- Instructed a VR design course for 20 undergraduate and graduate students, promoting an inclusive and supportive learning environment.
- Delivered specialized instruction in Maya and Unity for 3D modeling, animation, and game design applications.

CTK 352 – Game Design II **Normal, IL**

Graduate Teaching Assistant; *Dr. Greg Corness* **Spring 2024**

- Provided constructive feedback on student projects, focusing on the design and progression of content flow to enhance the gameplay experience for a diverse class of 55 graduate and undergraduate students.
- Graded assignments and assessments, ensuring fair evaluation and adherence to course objectives.

Research Experience

Illinois State University | Research Assistant **May 2024-**

- Research Question: How can gym instructors and players connect through Meta-Orion smart glasses, and how can instructors provide real-time feedback based on detected poses?

- Research Question: Which objects are most essential for blind and low-vision individuals to detect in their environment?
- proposed and led the project, recruited, and mentored undergraduate students, and developed iOS software.

Illinois State University | Independent Study Researcher

Feb2024-Aug 2024

- Research Question: Investigating the usefulness of supplemental software designed to enhance independent navigation for blind and low-vision people.
- Led a project, supervised one graduate student, developed visionOS software to detect objects and provide audio feedback for blind and low-vision people, conducted user testing and feedback sessions with two blind and low-vision users, and wrote a poster submitted to **ISMAR-24**.

Undergraduate Researcher

Feb 2021-May 2022

- Research Question: How can we make the campus more accessible?
- Research Questions: What specific barriers do students face on campus? How can technology and design interventions improve their campus experience?
- Conducted surveys and focus groups with 100+ students to identify accessibility challenges.
- Analyzed qualitative and quantitative data to pinpoint areas for improvement and developed actionable recommendations.
- Reviewed 50+ articles, coded responses from 600+ participants, and collaborated with a team of four to create and implement an accessibility audit.

Undergraduate Research Project

Feb 2021-Feb 2022

Student investigator; Supervisor: Dr. Sami AL-Tal

- Research Questions: How do different teaching strategies impact the academic performance of students with disabilities in higher education?
- Designed a mixed-methods study, developed surveys and interview protocols, recruited 100 participants, collected and analyzed data, and presented findings at the university symposium.

BeeLabs, Inc. | Quantitative Research intern

May 2021-Oct 2021

- Assisted with data cleaning, preparation, and analysis for a company focused on entertainment and design, helping to inform strategic decisions and improve program effectiveness.

Conference Proceedings

Qasrawi, Loiy. Corness, Greg., Carlson, Kristin. (2024, October). *SenseWay: Identifying Key Objects for Detection to Assist Blind and Low-Vision People*. Poster submitted at the 23rd IEEE International Symposium on Mixed and Augmented Reality (ISMAR'2024). Greater Seattle Area, USA

Presentations and Talks

Presentations:

Qasrawi, Loiy. (2024, May). Presented AR software I developed during spring 2024, designed to supplement navigation experiences for low-vision people, at the CTK Graduate review, Illinois State University.

Qasrawi, Loiy. (2022, March). Presented findings and results on strategies implemented to enhance campus accessibility at the Annual Research Symposium, American University of Madaba, highlighting key improvements and their benefits for the community.

Talks:

“Our campus accessibility” invited by Hassan T., American University of Madaba. Spring 2021

“Design for VR” invited by Dr. Amer Gharaibeh., American University of Madaba. Fall 2020.

“Why Universal Design?” invited by Dr. Sami Al-Tal., American University of Madaba. Spring 2020.

Industry Experience

Illinois State University | VR Developer

Aug 2024-

- Developed an immersive VR platform for educational purposes.
- Conducted user testing sessions with 20 participants to gather feedback and optimize VR experiences.

Kurzgesagt | Visual Designer

May 2024-Aug 2024

- Led **2 Dome shows and VR experiences** for the Kurzgesagt channel with **22.7M Subscribers**.
- **Analyzed 3 user feedback sessions** to gather insights and enhance the project's development.

Sesame Workshop | 3D Artist & Visual Designer

May 2022-July2023

- Worked with designers, animators, and producers to create **12 episodes of Sesame Street**.
- Developed **realistic 3D models and visual effects**.
- Assist in **5 virtual production projects**.

Watterson Towers, Illinois State University | Dishwasher, Busboy, Waiter

Aug 2023-Dec2023

- Cleaned and organized dishware for over 700 meals served per shift.
- Assist with Food preparation and presentation for more than 500 dining guests per shift.
- Collaborated with a team of 50+ staff members to maintain smooth operations during peak hours.

Awards, Honors, Grants

Best Interactive Media Award, Illinois State University

2024

Awarded "Best Interactive Media" based on jurors' votes at the ISU Galleries.

Research travel fund, Illinois State University

2024

Awarded to a graduate student to present research findings at external conferences.

Best Short film Award, AUM festival

2023

Awarded "Best Short Film" based on jurors' votes at the AUM Festival.

Best capstone project, American University of Madaba

2022

Awarded "Best capstone project" based on Attendee votes.

90% Tuition waiver, American University of Madaba

2019-2022

Awarded to undergraduate students who exemplify excellence and leadership.

COVID Typography Poster Award, Dsource Challenge

2022

Awarded "Typo Poster Award" based on jurors' votes.

Mentorship

CTK Buddy Support Program

2024-

Graduate mentor

AUM Mentorship Program

2021 - 2022

Undergraduate mentor

Selected service

Reviewer:

ACM CHI, Conference on Human Factors in Computing Systems.

IEEE VR, Conference on Virtual Reality and 3D User Interfaces.

Community service:

Volunteer, Friendship Association of the Blind

Aug 2018-Mar 2020

- Led 5 projects to support and assist blind and low-vision people.
- Coordinated a team of volunteers to organize events and activities, overseeing planning and fostering community engagement.