

Karen M. Royer

11 Dianne Lane, MA 01721 ~ (512) 751-4232 ~ kmroyer@wpi.edu ~ www.arundeldesign.com

EDUCATION :

Master of Science, Interactive Media and Game Development, 2019
Worcester Polytechnic Institute (WPI), Worcester, MA

Coursework: Design of Interactive Experiences
Immersive Human Computer Interaction
System Dynamics Foundation: Managing Complexity
Multidisciplinary Research Methods in Computational Media
Robot Futures: Design, Ethics, Communication
Learning and Creativity

Bachelor of Science, Related Art, 1987
University of Vermont (UVM), Burlington, VT

EXPERIENCE :

Research Assistant, 2019 – Present

- Designed the user interface in **Adobe XD** and debugged quilt design software in collaboration with Jordan Graves, a PhD student from Georgia Tech.
- Developed and debugged quilt design software using **Javascript** with Doctor Gillian Smith (WPI), Doctor Anne Sullivan (Georgia Institute of Technology, Georgia Tech) and Trusting Inekwe, fellow PhD student.
- Developed and facilitated workshops, learning outcome goals, assessments, logistics, facilitator notes and slide decks to achieve the goals of the NSF funded Code Crafters project with a rotating team of numerous graduate and undergraduate students along with Doctor Gillian Smith and Doctor Anne Sullivan.

Fellow IDeaStudio, Spring 2021 - Present

- Managed team of 6 to 8 graduate and undergraduate students prototyping and creating an application for the HoloLens2 for use in the Chemistry Department at WPI in collaboration with Professors Andrew Teixeira and Robert Dempski.
- Facilitated workshops for graduate and undergraduate students to learn new techniques in **Unity 3D, Maya and Adobe Photoshop**.
- Attended weekly update meetings to share progress on individual and collaborative projects with all stakeholders.

Fellow SWEET Center, Fall 2021 - Present

- Collaborate with the SWEET Center to Support(ing) WPI through Effective and Equitable Teamwork
- Conduct individual and team consultations with the support of Faculty mentors to ensure all students have “at least one highly effective and equitable team experience before they graduate, and that they leave with skills and tools to increase their own ability to collaborate effectively in teams throughout their careers.”

Global Lab Manager, 2018 - 2019

- Designed training material using instructional design best practices and the full **Adobe Creative Cloud Suite** for undergraduate lab employees to utilize for training others in leading edge video and sound equipment.
- Created promotional materials with full **Adobe suite** while organizing the logistics for special events and consequently conducted tours of the Global Lab for visiting donors and stakeholders.
- **Prototyped and designed** an experimental augmented reality application for the HoloLens using **Maya and Unity 3D**.
- Managed the new Global Lab at the Foisie Innovation Studio with Doctor Leslie Dodson and Doctor Stephen McCauley while on boarding and managing eight undergraduate lab employees.
- Instructed faculty, graduate and undergraduate students in the use and care of the laboratory equipment and use of the AR/VR media lab.

EXHIBITIONS & MEDIA :

GRiSTs - September 2021 - Presented Code Crafters research

[“Procedural Patchwork: Community-Focused Generative Design for Quilting”](#) - Creativity and Cognition, 2021

Made In MA - March 2019 - Exhibited “All Through the Night” - Unity, Visual Studio and HoloLens

WPI Computer Science 50th Anniversary - March 2019 - Exhibited “All Through the Night”

IndieCade - October 2018 - Exhibited “A Mile in My Shoes” - Tabletop board game, Mixed media

Different Games - October 2018 - Exhibited “A Mile in My Shoes”

Different Games - October 2018 - Exhibited “Inscribe” - Egg board game, Mixed media

BFIG 2018 Tabletop Showcase Finalist - September 2018 - Exhibited “A Mile in My Shoes”

George C. Gordon Library - Spring 2018 - Exhibited carved eggs including “Hanging By a Thread”

Rolf Ericson Award for Outstanding Doll Sculpture and Blue Ribbon - International Doll Convention

Orlando FL - Summer 2000

Best of Show - Best in Category - Blue Ribbon - San Francisco Bay Doll Art - Summer 1998

Judges Choice - Best of Group - Blue Ribbon - Bohler’s 1998 Anaheim Show - Fall 1998