

Sam Gates

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Education

University of Maine, B.S., Computer Science, May 2016

Work Experience

Software Engineer/Student Researcher • March 2014 - Present

Virtual Environment and Multimodal Interaction Laboratory

University of Maine, Orono, ME

- Responsible for creation of immersive Virtual Reality experiences
- Researched non-visual environment and scene access through haptic and audio feedback
- Mentored/taught new programmers
- Developed working prototypes for various research projects

Projects

Multi-Tag Radio Frequency Indication for Indoor Positional Tracking System

This project focused on developing affordable wireless indoor tracking technology aimed to provide the foundation for a non-invasive in home care system

Responsible for writing the code base used to interpret data received and developing a working prototype

Haptic Environment and Scene Access Research Projects

Researched the most efficient methods to portray environment and scene access information through non-visual modalities

Responsible for researching previously tested methods, developing interfaces to test the best practices for portraying the necessary information

Driving Simulator for Navigation Research

A virtual reality driving simulator aimed to research the degradation of a person's ability to develop a cognitive map as they grow older

Designed and developed the data logging, and event system portions of the project

Sam's Integrated Virtual Reality

Capstone project, program that acts as a middle-man between virtual reality hardware and virtual reality experiences so that new devices will be compatible with existing experiences

Researched, designed, tested and implemented the entire system

Awards

Best Research Exhibit, 2015 Center for Undergraduate Research

Skills

Programming Languages: C++, C#, C, javascript, Java, WebGL, Python, SQL, PHP, and Ruby
Proficient Using: Unity 3D, Unreal Engine, Visual Studio, Eclipse, Microsoft Office Suite
Adobe Photoshop, Blender, MySQL Workbench and GraphViz