

PROJECTS

Insight | Founder — CEO/CTO

Microsoft Imagine Cup, World Semifinalist, Middle East and Africa

Connect students with tutor of their choice and transported them into a personalized VR classroom

- Developed a web based interface using React that pairs students with tutors and launches a VR classroom
- Competed in Microsoft Imagine Cup, won in Saudi Arabia (picked from 400+ teams), and represented country as semi-finalist
- Talking to venture capitalists interested in providing seed funding, and with companies interested in licensing Insight

SynchronousFidelity | Research Assistant

Cornell University Virtual Embodiment Lab, Ithaca, USA

Track and visually represent user behavior occurring in Virtual Reality.

- Using Unity to develop collaborative virtual environments for embodied virtual interactions
- Created a RESTful server to communicate between the VR client and a database
- Added an R correlation module, allowing for the creation of virtual entities that respond to changing synchrony
- Collaborated with researchers — both onsite (during the summer) and offsite (in Saudi) — to fix bugs and run validation pairs

Visual-Netsim | Research Assistant

King Fahd University, Dhahran, Saudi Arabia

Visualize complex network systems in your web browser

- Developed a client-side graph generation algorithm for creating anisotropic graphs based on user specifications
- Integrated JSNetworkX, a popular port of Python's NetworkX library, for graph extensibility
- Assembled a UI for node dragging, graph generation, and preloaded graph selection from a server

EXPERIENCE

Cornell Virtual Embodiment Lab Research Assistant | (2016-present)

- Implemented a synchrony tracker in Virtual Reality (see SynchronousFidelity)
- Manuscript currently under review

Harvard Visual Computing Group Remote Volunteer | (2016 summer)

- Helped integrate a volumetric brain slice viewer into Rhoana, a pre-existing project.

King Fahd University of Petroleum and Minerals Research Assistant | (2014-2016)

- Worked on a web based network simulator (see JS-Netsim)
- Published 2 papers in conference proceedings

AWARDS

Microsoft Imagine Cup | Middle East and Africa | World Semi-finalist | International | 2017

Microsoft Imagine Cup Earth | algaetions.oshaiikh.com | 3rd place | International | 2016

King Fahd University of Petroleum and Minerals | Algorithms Hackathon. 4th out of 100+ participants | National | 2016

SELECTED PUBLICATIONS

Shaikh, O., Sun, Y. Won, A. (2017). Movement Tracker for Networked Virtual Reality Platforms. Manuscript submitted for publication in IEEE Virtual Reality, March 2018, Reutlingen, Germany

[Shaikh, O., Shahzad, F. \(2016\). Visual-Netsim: Development of an Interactive Browser Based Network Simulator. Paper presentation at the Future Technologies Conference, December 6-7, 2016, San Francisco, California](#)

EDUCATION

Dhahran High School | 2014-2018

Harvard Extension School | Various Computer Science courses | 2013 - 2016

I once had to sail a sunfish without my glasses. I can't see (much less do) anything without my glasses.