

SAMUEL CHENG

Interests

UX / Interaction Design
Healthcare | Education
Visualization | VR / AR

Connect

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808.392.3214
/in/samlcheng

Skills

Programming

Python | C# | Swift | SQL

Web

HTML | CSS | JS | D3
Bootstrap | React | Three

Prototyping

Framer | Sketch | Balsamiq
KiCad | Arduino

Tools

Unity3D | Xcode
Illustrator | InDesign
MicroSaint

User Research

Contextual Inquiry
Usability Testing
Affinity Mapping

Experience

Graduate Research Assistant 2015-2017

Georgia Tech Research Institute | Atlanta, GA

- Developed SimPy simulations to optimize workflow efficiency and personnel training for Marine Corps radio repair technicians.
- Designed experiment to measure fatigue and strain among hand tools.
- Developed novel cognitive model for skill decay in organizational design teams (HFES 2017 submission).

Human-Computer Interaction Intern 2016

Draper | Cambridge, MA

- Developed interactive driving simulation in C# (Unity3D) to test augmented reality (AR) visual and audio solutions to mitigate distracted driving.
- Engaged in user testing and brainstorming design sessions.

Computer Scientist 2012-2015

US Army NETCOM | Ft. Huachuca, AZ

- Developed Python user interface using wxPython toolkit to simplify enterprise-wide deployment (70+ bases) of server files.
- Built and hardened web server using ASP.NET and HTML/CSS/JS to host critical Army cryptographic files.

Selected Projects

EOB Reader 2017

- Developed iOS application using Swift and Tesseract OCR engine to empower patients to understand medical bills.
- Utilized human-centered design principles to reduce healthcare fraud and the impact of medical identity theft.

kEMStree 2016

- Developed Virtual Reality (VR) chemistry game application in C# (Unity3D) using Electrical Muscle Stimulation and Leap Motion hand tracking to demonstrate kinesthetic learning possibilities for students.
- Presented work at UIST 2016 conference.

Floating Doctors 2016

- Developed D3.js and React.js visualization of multivariate medical patient data for doctors of a non-profit organization.

Education

MS, Human-Computer Interaction 2015-2017

Georgia Institute of Technology | Atlanta, GA

BS, Computer Science 2008-2012

Carnegie Mellon University | Pittsburgh, PA