Joyce Y. Chen

Software Engineer, UI & UX Designer
MIT Graduate – Bachelor of Science in Computer Science & Engineering

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Skills

Programming
Python, C++, Java, p5,
Processing, Git, Halide

Web Development
HTML/CSS, JavaScript,
React.js, WordPress

**User Interface and
User Experience**
User research,
interaction design,
usability testing

Rapid Prototyping
Software and physical
prototyping in teams

Graphic Design
Adobe Photoshop,
Illustrator, InDesign

3D Design / CAD
AutoDesk, SketchUp

Illustration
Traditional drawing,
Architectural drafting

Awards

Top Ten Finalist
MakeMIT 2015

Silver Key
Visual Arts
Scholastic Award 2013

First Place
Architecture
Florida State Fair 2011,
2012 & 2013
Miami-Dade Fair 2011,
2012 & 2013

Education

2014–18 Massachusetts Institute of Technology (MIT)
Computer Science & Engineering (6-3)

Design classes
- Introduction to Design
- UI Design & Implementation
- Intelligent Multimodal UI
- Video Game Design
- The Word Made Digital
- Exploratory Programming for the Arts and Humanities

Technical classes
- Software Construction
- Computational Photography
- Artificial Intelligence
- Algorithms
- Automata, Computability, & Complexity
- Machine Learning

Work Experience

2017–18 MIT Media Lab Research, *Programmer and UI & UX Designer*
- Designed, developed, and deployed a lab-planning simulator for GlaxoSmithKline's site planners and architects. Programmed the importer and renderer to take in raw floorplan files. Designed and implemented the graphical and tangible interfaces.
- Adapted a pharmaceutical manufacturing simulation for web, programmed full functionality, and improved UI and graphics.
- Designed posters for Media Lab's Members Week and the IEEE Future Technologies Conference.

2016–17 MIT Teaching Systems Lab Research, *Graphic and UX Designer*
- Designed graphics and tested the UI and UX of many learning experiences, challenges, and games for various teaching models.
- Created a variety of marketing and brand identity graphics for an open-house and summer workshop.

Projects

2018 Action-Triggered Stage Control
- Created a practice tool to help anyone learn a script and stage directions for a play with a Kinect and the Chrome Speech API.

2017 Runstoppable (runstoppable.io)
- Designed, prototyped, and implemented a website for runners to track, compare, and analyze all of their runs.

2013 Compact Water Filtration System – **US Patent: 61/974,863**
- Deployed a water filtration device in Kasai, Haiti, Nigeria, Argentina, and the Philippines to provide villages with clean water and prevent illness from contaminated water.
- Invited to be a keynote speaker at Conrad Awards: Spirit of Innovation, the USA Science & Engineering Festival, and the American Society of Plumbing Engineers Symposium.