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
- Processing and p5.js
- Lua
- Git
- Halide

Full Stack Web Development
Front-end
- React.js
- HTML/CSS
- JavaScript
- WordPress

Back-end
- Django
- MySQL
- Docker

User Interface and User Experience
- User research
- Interaction design
- Usability testing

Rapid Prototyping
Software and physical prototyping in teams

Design and Editing Software
- Adobe suite: Photoshop, Illustrator, InDesign, XD
- Figma
- Davinci Resolve
- AutoDesk AutoCAD
- Google SketchUp

Interests

- Papercraft miniatures
- Origami
- Wiki editing

Work Experience

2018 – Present

Independent Consultant, *Software Developer*
- Working on an inventory calculator that can give recommendations
- Developed a website management suite for a wholesale company
- Created tools that: catch invoice duplicates (reducing mistakes by 81%), estimate pallet packing (reducing task time by 90%), and more

2017 – 2018

MIT Media Lab Research, *Programmer and UI & UX Designer*
- 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
- 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, won Best Project Demonstration

2016 – 2017

MIT Teaching Systems Lab Research (TSL), *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 brand identity graphics and marketing for TSL, their open-house, and their summer workshop

Education

2018

Massachusetts Institute of Technology (MIT)
Bachelor of Science in Computer Science & Engineering (6-3)
- **Technical Classes:** Software Construction; Algorithms; Computational Photography; Artificial Intelligence; Automata, Computability & Complexity; Machine Learning; etc.
- **Design Classes:** Intelligent Multimodal UI; UI Design & Implementation; Introduction to Design; Video Game Design; The Word Mad Digital, Exploratory Programming for the Arts and Humanities etc.

Select Projects

2021 – Present

Google Form Response Data Aggregator | Python and Excel
Working on a tool to aggregate submissions and flag conflicting results

2020

Template-based Image Batch Processor | Photoshop and JavaScript
Made a tool to simplify exporting a batch of images with a PSD template

2018

Action-Triggered Stage Control | Kinect and Chrome Speech API
Created a practice tool to help anyone learn lines and stage directions

2018

Runstoppable | React and Garmin watch
Built a website for runners to track, compare, and analyze their run data