

Tanya Lai

tanyalai@umich.edu • tanyalai.github.io
linkedin.com/in/tanyalai23 • github.com/tanyalai • (989) 495-8647

EDUCATION

University of Michigan

Ann Arbor, MI

Bachelor of Science in Engineering, Computer Science Engineering, Minor in Music

May 2022

- Relevant Coursework: Computer Organization, Data Structures and Algorithms, Computer Security, Linear Algebra, UI Development, Web Systems, Computer Vision, Technologies to Optimize Human Learning

EXPERIENCE

Creative Coding Lab at the University of Michigan–School of Music, Theatre & Dance

Ann Arbor, MI

Research Assistant to Professor Anil Çamcı

Nov. 2019 – present

- Designed, evaluated, and implemented user requested features, such as undo-redo chain, low-frequency oscillations, UI help and cross-browser collaboration, for the desktop version of Inviso: a cross-platform user interface of AR, VR, and a web app for designing immersive, 3D, sonic environments
- Won the Best Installation Prize at the summer 2020 New Interfaces for Musical Expression conference
- Web app domain: inviso.cc | Tech: JavaScript, three.js, Firebase, HTML, CSS, Google Apps Script

EECS 183: Elementary Programming Concepts

Ann Arbor, MI

Course Staff Grader

Sept. 2019 – present

- Facilitated timely feedback by grading projects and exams with regards to code style practices and general logical correctness to encourage students in the 14th largest university course to write clean code

Oculate

Lisbon, PT

Software Engineering Intern

July 2019 – Aug. 2019

- Built and tested front-end and back-end of admin panel to increase efficiency in managing ophthalmology surgery consignments and to oversee relations between distributors, medical practices, and surgery products from suppliers like Hoya, Albomed GmbH, and Moria Ophthalmic
- Tech: Ionic, Angular, LoopBack, JavaScript, TypeScript, HTML, CSS

M-Interact Lab

Ann Arbor, MI

Research Assistant

Sept. 2018 – May 2019

- Researched patients' in-vitro fertilization data from the University of Michigan's Center for Reproductive Medicine to study psychosocial mechanisms of a patient's experience and construct a cognitive-emotional framework for a mobile app to enhance patient-centric service delivery and psychosocial support

PROJECTS

Convertify – Lo-fi Music Maker

tanyalai.github.io/convertify | *Django, Python, JavaScript, Youtube API, FFmpeg, HTML, CSS*

Oct. 2020

- Created a web app to help people explore data and music by taking in text input or an article link, scraping the web for audio, and performing audio processing to output lo-fi music and audio wave visualizations
- Won Most Creative Data Hack, chosen by Splunk, at the Technica 2020 Hackathon

Airbnb-Like Web App Suite and Backend

tanyalai.github.io/airbnb | *Ionic, Angular, Express.js, JavaScript, TypeScript, MySQL, HTML, CSS*

July 2019

- Developed a suite of three Airbnb inspired apps (a consumer, property host, and admin panel app) connected to a MySQL database with a REST API built with Express.js and CRUD functionalities

Magic Muse

tanyalai.github.io/magicmuse | *E100-Assembly, Python, Verilog*

Jan. 2019 – Apr. 2019

- Designed and built a dynamic, microprocessor-based, musical instrument toy that plays sounds based on the user's location within a camera field to promote musical awareness and creative exploration

EXTRACURRICULARS

Tech for Social Good | *Content Team Member and Financial Chair*

Jan. 2020 – present

MedLaunch | *Software Division for Biomedical Design Team*

Sept. 2019 – present

Michigan Pops Orchestra | *Double Bassist and Personnel Director*

Aug. 2018 – present

SKILLS

Languages: C++, JavaScript/ TypeScript, Python, C, HTML, CSS