ZHIXIANG TEOH

zhixiangteoh@gmail.com https://teohzhixiang.com https://github.com/zhixiangteoh (734) 545 9845

EDUCATION

University of Michigan, Ann Arbor, MI, 2021 – 2023
- B.S. Computer Science, ArborHacks, Google DSC Design & Engineering, GitHub Campus Expert

University of Pittsburgh, Pittsburgh, PA, 2019 – 2020
- Computer Science Club Mentor, Math Club Communications Director, Second Place Big Idea Blitz 2020

SKILLS

Programming Languages: Java, C++, JavaScript, Python, OCaml, Haskell
Technologies/Frameworks: JUnit, Enzyme, React (Redux, Context), Three.js, Node.js, MongoDB, SQL, CI/CD

MEDIA

Featured on Facebook's developers blog for work on WebXR layers

EXPERIENCE

Open Source Fellow – Facebook/WebXR, Major League Hacking, Remote, Jan 2021 - Apr 2021
- Built immersive web video experiences using Three.js 3D rendering library and the new Media Layers API, supervised by Rik Cabanier at Facebook
- Extended samples to support different types of media, including 2D, 180/360-degree mono and stereo
- Won hackathons for open-source projects SlateVim and Retrospective-Tracker (see projects)

Software Engineering Project, National University of Singapore, Singapore, Aug 2020 - Dec 2020
- Applied object-oriented paradigm, Java 8 Streams, and unit and integration testing in a team CLI project
- Wrote 3500/6000 lines of code, including main Game Mode, and 40% of user and developer docs
- Managed issues and releases, and authored over 30 peer-reviewed PRs in two months

Teaching Assistant and Peer Tutor, University of Pittsburgh, Pittsburgh PA, Jan 2020 - Dec 2020
- Undergraduate Teaching Assistant in Intermediate Java and Data Structures & Algorithms
- Designed material for weekly labs, and hosted individual office hours; 20h/week
- Highest OMETS teaching survey response rate, 70% reported "enhanced understanding of class material"
- Student tutor in the Math and CS Resource Centers, in courses up to Linear Algebra and Algorithms

PROJECTS

Retrospective Tracker, MLH Fellowship Halfway Hackathon, Mar 2021
- Browser extension to track weekly categorized notes; winner out of 11 projects (44 participants)
- Drag-and-drop UI and auto-save using React Context to manage application state
- Formed team and authored 8 PRs and tracked all 13 progress and feature issues

SlateVim, MLH Fellowship Orientation Hackathon, Feb 2021
- Online collaborative Vim editor built with Slate.js; winner out of 31 projects (91 participants)
- AWS Amplify serverless GraphQL API to handle mutations and subscriptions for live collaboration

Course Review, Personal, Dec 2020
- Interactive course review web platform built on MERN stack
- Fully functional login system built from scratch, and integrated with Algolia's InstantSearch API

Monads in Java, Programming Languages Course, Oct 2020
- 10-page summary research report explaining and implementing monads in Java
- Wrote body sections, code snippets for Maybe and Either classes, tests for conformity with monad laws

Machine Learning Methods in R, Machine Learning Course, Oct 2020
- Compared various machine learning methods, from simple linear regression to support vector machines
- Analyzed a 2000-samples raw materials dataset with twelve continuous inputs and two discrete inputs