

Kyle Zheng

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Education

Purdue University, West Lafayette, IN

May 2023

- Bachelor of Science in Computer Science

GPA: 3.73/4.00

Experience

Tulip - Software Engineer Intern

May 2022 - Aug 2022

- Owned and delivered rich text editing feature, improving customer ability to style multilingual text (React)
- Migrated multilingual text data to rich text format while minimizing developer disruption (MongoDB)
- Refactored and created new UI elements, focusing on accessibility and improvements in core user paths

LifeOmic - Software Engineer Intern

May 2021 - Aug 2021

- Worked with team to design and implement payment transactions feature
- Created and presented interface (React) for transactions management and history to stakeholders
- Ensured code quality and stability by writing unit tests and end-to-end UI tests (Jest, Cypress)
- Prototyped transaction data visualizations to improve customer spending visibility

Purdue Cognition and Learning Laboratory - Web Programmer

May 2020 - May 2023

- Developed custom programs and online experiments for psychology researchers (Javascript)
 - Manage experiment data using jsPsych, MongoDB, Node.js
 - Continuous updating and migrating legacy Angular/Express app before rewrite to Nextjs, Typescript
 - Redesigned API endpoints, fix security flaws, add tests, and maintain compatibility to allow soft transition
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Projects

qrframe - QR code generator

qrframe.kylezhe.ng

- Implemented QR code generator library from scratch in Rust with SVG output
- Imported as WASM in frontend to enable generating QR codes in real time as parameters change
- Learned about Reed-Solomon error correction and finite field arithmetic

pixelgame - Online tic-tac-toe game

pixelgame.kylezhe.ng

- Interactive multiplayer game built with Elixir, Phoenix web framework
- Lobby system with join links, custom game rules and player markers
- Implemented bots with game playing algorithms such as minimax

review-app - Movie review terminal app

ssh-reviews.kylezhe.ng

- Terminal app built using Go, Bubbletea framework accessible over ssh
- Server built using Rust, Actix Web framework, Postgresql to search for movies and store reviews
- Public API used to show latest reviews on my personal website