

# Jiaxuan (Robert) Zhang

443-467-4520 | [jiaxuanzhang066@gmail.com](mailto:jiaxuanzhang066@gmail.com) | Baltimore, MD | [linkedin.com/in/~rz](https://www.linkedin.com/in/~rz) | [robertzhang.vercel.app](https://robertzhang.vercel.app)

## EDUCATION

### Johns Hopkins University

Baltimore, MD

Combined BS/MS in Computer Science (GPA 3.79/4.00)

Aug. 2019 – May 2024

**Distinctions/Positions:** Dean's List, Course Assistant for Full-Stack JavaScript and Functional Programming in Software Engineering, JHU ACM System Admin

**Relevant Coursework:** Compilers, Principles of Programming Languages, Functional Programming in Software Engineering, Full-Stack JavaScript, Intro Algorithms, Open Source Software Engineering

## SKILLS

**Languages:** English (native/bilingual proficiency), Chinese (native/bilingual proficiency)

**Programming Languages:** JavaScript, TypeScript, OCaml, ReScript, C, C++, Rust, Java, SQL

**JavaScript Ecosystem:** React.js, Next.js, Node.js, Babel, Rollup, webpack, Redux, GraphQL, Express.js, Tailwind CSS

**Tools/Databases:** Git, Linux, NPM, Yarn, Vim, AWS, Docker, MySQL, PostgreSQL, MongoDB

**Areas:** open source, programming language theory, DevOps, Android

## EXPERIENCE

### Software Engineer Intern

May 2022 – Aug. 2022

Meta @ React Core ([reactjs.org](https://reactjs.org))

Menlo Park, CA

- Shaped the future of React by contributing to React Forget, an experimental auto-memoizing compiler that eliminates manual usage of `useMemo` and `useCallback`. Implemented pretty printers for compiler intermediate representations (IRs). Optimized compiler debug outputs like dependency graphs through immutable snapshots.
- Created and owned the React Forget Playground, a compiler explorer showcasing the compiler output and IRs and a REPL with interactive examples. Introduced live-rendered preview from multi-tabbed Playground input, dependency graph visualizations, code size comparison with/without Forget, etc. Playground is the gateway to React Forget and a general educational tool for React, and is irreplaceable in internal discussions on the compiler.

### Tech Lead

Jan. 2021 – Present

uCredit ([ucredit.me](https://ucredit.me))

Baltimore, MD

- Founding member of uCredit, a shareable and accessible degree planning platform for JHU students and faculty.
- Lead design and implementation of frontend. Utilize Next.js, TypeScript, Redux, Tailwind CSS, etc.
- Implement backend with TypeScript and Express.js. Cache course data fetched from university API with MongoDB. Implemented university OAuth login with Passport.js.
- Host weekly office hours (2-3 hours/week) for entire team to help resolve technical questions.

### Full-Stack Development Intern

May 2021 – Aug. 2021

ByteDance (TikTok) @ Web Infra ([webinfra.org/en/about](https://webinfra.org/en/about))

Beijing, China

- Built frontend for Mobile DevOps platform. Supported 50+ teams with customizable event alerts, webhooks, etc. Attained ~500 daily active users. Refactored Redux and routing logic into custom React hooks and refurbished UI.
- Utilized React.js, TypeScript, Redux, webpack, Tailwind CSS, etc. Implemented microservices.
- Maintained Modern.js ([github.com/modern-js-dev/modern.js](https://github.com/modern-js-dev/modern.js)), the open source meta-framework supporting 1100+ apps at ByteDance. Added internationalization to CLI.
- Interviewed guest speaker Dan Abramov, React Core team member, on the release of React 18, while co-hosting event for team and public. Compiled and selected questions collected from 5000+ live audience.

## OPEN SOURCE PROJECTS

**Lyte**, Author | *TypeScript, Rollup, Babel, Storybook, Tailwind CSS, NPM*

May 2022 – Present

- Created Lyte ([github.com/robertzhidealx/lyte](https://github.com/robertzhidealx/lyte)), a collection of highly extensible React components, including Selectable, a beautiful (multi)select dropdown component.
- Added full TypeScript support, comprehensive documentation, and dark mode.

**LytePQ**, Author | *JavaScript, Rollup, NPM*

Jul. 2021 – Present

- Created LytePQ ([github.com/robertzhidealx/lytepq](https://github.com/robertzhidealx/lytepq)), a concise and highly performant JavaScript data structures library packaging a priority queue, disjoint sets, etc.
- Added full TypeScript type declarations, comprehensive JSDoc annotations, full-spectrum unit tests, and linting.