

# Yuchen (Abi) Liu

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## TECHNICAL SKILLS

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**Languages:** TypeScript, JavaScript, HTML/CSS

**Frameworks:** React, Node.js, Express.js, MongoDB, Mongoose, MaterialUI, Bootstrap, MantineUI

**Developer Tools:** Git, Unit Testing (Jest), VS Code, Postman

**Miscellaneous:** Netlify, Render, Object Oriented Programming (OOP), Agile Methodology, Node Package Manager (NPM)

## OPEN-SOURCE CONTRIBUTIONS

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**Medplum** [github.com/medplum/medplum](https://github.com/medplum/medplum)

Open Source

*Healthcare Developer Platform*

*July 2023 - Present*

- Enhanced Medplum's batch upload tool, allowing users to upload multiple FHIR bundle resources simultaneously, improving efficiency and usability.
- Implemented separate output tabs for each uploaded file, providing a clearer view of the uploaded data and streamlining the data management process.
- Introduced a copy button for resource IDs, improving the developer's workflow and making essential information more accessible.
- Technologies used: TypeScript, React, Mantine UI.

## PROJECTS

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**ToyScript** | *JavaScript, Jest, Git*

September 2023 – Present

- Designed and implemented a custom programming language from scratch.
- Developed a custom lexer and parser, enabling the language to recognize a wide range of syntax and expressions.
- Built an Abstract Syntax Tree (AST) interpreter, enabling code execution and evaluation.
- Created an environment system, supporting variable declarations, assignments, and scoping rules.
- Developed a comprehensive test suite for the language to ensure its correctness and reliability.
- GitHub: [github.com/Abi-Liu/ToyScript](https://github.com/Abi-Liu/ToyScript) | Medium Article: [medium.com/@abiliu018](https://medium.com/@abiliu018)

**Valorant Finder** | *TypeScript, Node.js, Express, MongoDB, React, Jest, Git*

June 2023 – August 2023

- Developed a full-stack web application using with Node.js serving a REST API with React as the frontend.
- Reduced loading times by up to 100% by implementing a caching system for match and profile data.
- Implemented Unit testing with Jest and Supertest to enhance endpoint robustness and reliability.
- Used MaterialUI to build an intuitive and visually appealing interface on all screen sizes.
- Implemented Local Auth for account creation
- GitHub: [github.com/Abi-Liu/Valorant-Team-Finder](https://github.com/Abi-Liu/Valorant-Team-Finder)

**FinanceMe** | *JavaScript, Node.js, Express, MongoDB, React, Git*

March 2023 – April 2023

- Integrated the Plaid API's to enable users to connect and manage multiple bank and credit card accounts.
- Categorized and displayed transactions with Material Table to enhance user understanding of spending habits.
- Built UI with MaterialUI and incorporated the Google Charts API for data visualization and financial reporting.
- Implemented Google OAuth for account creation.
- GitHub: [github.com/Abi-Liu/Finance-Me](https://github.com/Abi-Liu/Finance-Me)

## EDUCATION

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**100Devs**

Remote

*Full Stack Software Development Program*

*June. 2022 – June 2023*

**University of California - Santa Cruz**

Santa Cruz, CA

*Bachelor of Arts in Business Management Economics*

*September 2018 – December 2022*