

Yueheng Yuan

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TECHNICAL SKILLS

- Language: JavaScript, TypeScript, HTML/CSS, Python, Java, C/C++, Go, Ruby, Swift, R
- Framework & Tools: React, Vue, Angular, Flask, Django, Express, Node.js, Maven/Gradle, Spring Boot
- Databases & Cloud Services: PostgreSQL, MongoDB, MySQL, Redis, AWS, Docker, CI/CD, Git

WORK EXPERIENCE

CLYNK

July 2024 - December 2024

Software Developer

- Architected and implemented a scalable full-stack platform using **Vue** and **TypeScript**, collaborating with **financial** and **analytical** teams, which supported a **25%** increase in daily transaction volume
- Revamped invoice dashboards using Vue.js, achieving a **20%** reduction in page load time by optimizing component rendering and state management, which enhanced user engagement by **15%**
- Developed and maintained **RESTful APIs**, optimizing data exchange between financial services, resulting in a **25% reduction** in transaction processing time and improving data consistency by **30%**
- Optimized **SQL** queries and restructured the database schema for the invoice management system, reducing data redundancy by **35%**, cutting query response time by **40%** and boosting invoice retrieval efficiency across **50,000+** products
- Created and deployed **CI/CD** pipelines using Docker, slashing deployment time by **50%** and ensuring 100% continuous integration and automated testing coverage

PROJECTS

GeneWeaver Backend System, geneweaver.org

August 2023 - December 2023

- Developed **REST API** for Jackson Laboratory using **Python & Flask** in **Scrum** environments
- Integrated analytical tools in microservices and mitigated downtime during tool update by **18%**
- Developed backend business logics including user authentication/sign-on and gene set upload; Performed data insertion and retrieval with **PostgreSQL** and **SQ-Lite**
- Optimize runtime performance on concurrent tasks using **Async** Python and recurrent analytical queries using **Page Caching**; Implemented secure data access point using **HTTPS** protocols & web authentication

eCommerce Platform

May 2023 - December 2023

- Built up a **MERN** stack-based eCommerce platform; Developed and maintained software features to enhance customer engagement through front-end **UI** components, REST API services, and data modeling
- Designed data model using **MongoDB**; integrated **Mongoose** for query searching performance enhancement and **Redis** for schema definition; Leveraged **JWT** for API authentication and **Redux** Toolkit for state management
- Applied **Postman** for end-to-end testing and **Stripe** API for payment; Utilized **Heroku** for deployment & **CI/CD** pipeline for smooth deployment and continuous integration

Biopharmacy: The Design and Synthesis of Novel Inhibitors of HIV Capsid Protein

January 2018 - May 2018

- Performed amide-coupling reactions and TFA deprotection reactions on small scales, using extraction and Rotary evaporator as well as Combi-Flash techniques
- Improved methods of inhibitor synthesis via the study of interactions with carboxylic acids and reaction efficiency; Characterized products with ^1H NMR, TLC, and Mass spectroscopy

EDUCATION

Northeastern University

September 2022 - May 2025

Master of Science in Computer Science

University of Minnesota, Twin City

September 2015 - May 2019

Bachelor of Science in Chemistry