

Bowang Lan

(206) 697-7826 | blan2@uw.edu | bowanglan.dev | linkedin.com/in/bowang-lan | github.com/BowangLan

EDUCATION

University of Washington
Bachelor of Science in Astronomy

Seattle, WA
Sep 2020 – Dec 2024

EXPERIENCE

Team Leader & Software Engineer ☞
Organization of Hua Classmates

Sep 2020 – June 2024
Seattle, WA

- Rebuilt the UWClassmate website using Next.js, TailwindCSS, and Prisma, resulting in a more user-friendly and responsive design, and increased page loading speed by 50%
- Enhanced website security and UX by refining the authentication system, resulting in a 50% decrease in unauthorized access attempts and a 15% increase in user registrations
- Led a team of around 10 individuals, ensuring successful project completion, enhancing team collaboration, and promoting professional growth

Software Engineer
LEAPS

July 2023 – Present
Seattle, WA

- Engineered a robust backend authentication system using AWS Cognito, enhancing platform security and reducing unauthorized access attempts by 80%
- Spearheaded the integration with Agora for live streaming, resulting in a 50% increase in user engagement and real-time interactions
- Designed a comprehensive database schema tailored for live streaming, optimizing data retrieval times by 40%

Research Assistant
University of Washington

June 2022 – July 2022
Seattle, WA

- Engineered a responsive website for the EmojiCloud Python package using Python FastAPI (backend) and Next.js (frontend) with WebSocket communication
- Containerized the entire application using Docker, reducing deployment times by 50% and ensuring consistent environment setups
- Architected a robust task queue system using Celery, RabbitMQ, and Redis, deployed on AWS with AWS EC2, AWS MQ, and AWS ElasticCache, achieving a 99.95% uptime on AWS and handling over 100 tasks per hour

PROJECTS

WebGem - Web Application ☞

Nov 2023 – Present

- Scraped 1000+ portfolio website data from multiple sources, stored them in a PostgreSQL database, and set up data automation pipeline using Selenium for detecting non-responding websites and taking screenshots.
- Developed a responsive and engaging web application using Next.js, TailwindCSS, shadcn-ui, and TypeScript, incorporating latest Next.js and React features such as React Server Components and Server Actions.
- Optimized image performance by setting up an AWS S3 bucket for hosting portfolio website screenshots and AWS CloudFront as a CDN, resulting in faster image loading times and reduced S3 bucket load.

ChatGPT Archive - Chrome Extension ☞

June 2023 – Present

- Developed a Chrome extension for ChatGPT using Vite and React, leading to a 30% boost in user productivity by introducing features such as quick search via keyboard shortcuts, a comprehensive folder & tag system, and seamless integration with platforms like Notion
- Prioritized user accessibility, designing the UI using Shadcn UI, resulting in positive feedback from test users regarding ease of use
- Ensured user data privacy by leveraging Dexie.js for CRUD operations, storing synced conversation data directly in the browser

SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, TypeScript

Frameworks: React, Next.js, Express.js, FastAPI, shadcn-ui, TailwindCSS, Celery, RabbitMQ

Database: MySQL, PostgreSQL, Redis, Neo4j

Developer Tools: Git, Docker, AWS, Google Cloud Platform, Vim