HENRY BAO

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SUMMARY

As a Software Engineer, I am well-versed in Object-Oriented Programming (OOP) and Data Structures & Algorithms, with experience building and deploying full-stack solutions using agile development practices. I have a strong command of multiple programming languages, including JavaScript, Java, Swift, and R. My skillset includes designing UIs with React, writing server-side services and building APIs, and manipulating both SQL & NoSQL databases. I possess a solid understanding of authentication, security, and version control.

EXPERIENCE

NetPrism   Jun 2022 — Present

Software Engineer

- Led a software startup enabling users to make intelligent data-driven decisions thanks to a data analytics and processing platform. Ideated and conceptualized the product and owned the full software development lifecycle, implementing with TypeScript and associated web technologies.
- Evaluated technical requirements, researched adequate technologies, and analyzed characteristics in terms of scalability and sustainability in order to avoid future technical debt.
- Built a web scraper powered by Google's Puppeteer library together with a Node.js RESTful API server to extract and analyze data readily available online.
- Migrated an existing mobile application, Restock Alerts' backbone, to the newly developed NetPrism API.
- Implemented and managed several continuous integration and continuous deployment (CI/CD) pipelines to automate the platform's build, test, and deployment process, to improve the speed and reliability of software releases.
- Deployed the platform to a cloud-based infrastructure, and leveraged tools such as Docker and Gitlab CI to ensure scalability and high availability.
- Maintain up-to-date knowledge of web & mobile technologies and best practices and monitor industry & competitive trends.

PROJECTS

PetMeet   Mar 2022 — Jun 2022

- Designed and developed an iOS application for pet owners to find friends for their pets, utilizing SwiftUI, UIKit and Storyboard to create a modern user interface.
- Decided on requirements and specifications and documented architecture, features, and technologies in a clear and concise design document allowing for faster and easier implementation.
- Built the backend with Firebase as the ideal solution for image and data persistence.

TypeScript Compiler Architecture Analysis   Dec 2021 — Mar 2022

- Conducted a detailed component-level architecture analysis of the TypeScript compiler.
- Determined styles and patterns used by the code base, assessed the architectural quality and identified architectural flaws to perform system improvements by refactoring code.

Goal Husky!   Mar 2021 — Jun 2021

- Managed a team of 4 and delivered a responsive web app using JavaScript and React, aiming to increase productivity and social networking among UW students during remote living mode.
- Designed a user-friendly interface with a card deck overview of goals posted, sorted by categories and searchable by keywords.
- Implemented a sign-in feature for users to join or publish goals, with a ranking page based on the number of current participants.

Vade   Dec 2020 — May 2022

- Delivered a multi-purpose Discord Bot to bring additional functionalities to the platform such as automated server moderation, an advanced music playlist system, and alternative bot interactions for users with disability and impairments.
- Amassed over 300k total users across more than 1000 different communities within 5 months of launch.

EDUCATION

University of Washington   Sep 2019 — Jun 2023

B.Sc. in Informatics

- GPA: 3.8/4.0
- Honors/Awards: Annual Dean's List (2020-2022)

SKILLS

- **Languages:** Java, Javascript, TypeScript, Swift, R, HTML/CSS
- **JavaScript Stack:** React, jQuery, Node.js, Express, Puppeteer, Playwright
- **Databases:** Azure SQL Server, MongoDB, Firebase
- **Tools:** Postman, Git, Yarn, Linux, Docker, R Studio, Mongoose, tidyr, Figma