Cai Chen

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Experience

Software Engineering Intern   **May 2025 – Aug 2025**
Dwolla   *Des Moines, Iowa*

- Identified and resolved a prefetching bug during development that would have triggered Cloudflare IP bans using browser dev tools and log analysis, **preventing potential disruption for 1200+ users**.
- **Delivered 2 complete pages** and **4 components within the first 4 weeks**, progressing from collaborative mob programming to independent feature development while maintaining code quality standards.
- Identified UI inconsistencies across multiple pages and components, developing universal and dynamic components that are **used in 30+ instances** throughout the entire codebase.
- Scoped, built, and tested **10+ new dashboard features** using **TypeScript**, **Material UI, Next.js**, **Redux Toolkit**, **Scala**, **Jest, and Storybook,** enhancing accessibility, speed, maintainability, and usability.
- Developed in an **Agile Scrum team** by refining technical requirements, estimating effort in **Jira**, and writing production-ready code within 2-week sprint cycles.

Founder & Software Engineer   **Feb 2025 – Present**
Chardle.com – Daily Character Guessing Game   *Remote*

- Built and launched a **full-stack** web application using **React.js, Vite**, and **Tailwind CSS** with user authentication, data persistence, leaderboards, and daily resets, **driving 20,000+ monthly users** and **supporting 15+ franchises**.
- Established a partnership with ad-tech platform Venatus, optimizing ad inventory, achieving a **130% revenue increase** over Google AdSense.
- Implemented secure user authentication and accounts with **Supabase (PostgreSQL)** and RESTful APIs supporting full CRUD operations, **increasing user retention by 35%** and boosting cross-platform engagement.
- Architected and migrated backend infrastructure to **AWS** (**Lambda, API Gateway**, **CloudFront, DynamoDB**, **S3**) using **Express.js** and **Typescript**, **reducing server costs by 20%** while enabling seamless scalability.
- Drove organic traffic growth through **SEO** optimizations, achieving **first-page rankings** across **20+ pages**.
- Developed an AI-powered content automation pipeline using **n8n** workflows, **ChatGPT** integration, and **Python** scripts, containerized in **Docker**, reducing franchise creation time by **2 hours per franchise**.

Technical Skills

Languages: TypeScript, JavaScript, Java, C, Python, Bash, HTML/CSS
Frameworks & Libraries: Next.js, React.js, Redux Toolkit, Express.js, Node.js, Spring Boot, Tailwind CSS, Material UI,
Tools & Infrastructure: AWS (Lambda, API Gateway, CloudFront, DynamoDB, S3), Docker, Git, NoSQL, SQL, Jira, Linux

Projects

Czchen.dev – Windows 11 Inspired Portfolio Site   **June 2025 – July 2025**
Next.js, TypeScript, React, TailwindCSS, MongoDB, Node.js, OpenAI API, Spotify API

- Developed an interactive portfolio featuring responsive, draggable UI components and 10+ custom apps, integrating diverse **APIs** to build a **full-featured Spotify clone** and a **ChatGPT assistant.**

WorkSync – Workforce Management App   **Jan 2025 – May 2025**
Spring Boot, Java, JUnit 4, MySQL

- Architected a workforce management system in a **4-person team** using **Spring Boot**, **Java**, **Junit5**, and **MySQL**, earning **Best Coder Award** and **2nd Best Project** in the section.

Education

Iowa State University   **Expected Graduation: December 2026**
Bachelor of Science in Computer Engineering   *GPA: 3.4*