Owen Cai

(859) 397-8071 | owenbcai@gmail.com | https://www.linkedin.com/in/owenbcai/ | https://billert.dev/ | US Citizen

Education

Texas A&M University — May 2027
Bachelor of Science in Computer Science, Engineering Honors — *GPA:* 4.0

Relevant Coursework: Data Structures & Algorithms, Discrete Mathematics, Probability, Linear Algebra

Experience

Switchless LLC — January 2025 - Present
Software Engineer Intern — *College Station, TX*

- Programmed backend software running on smart home hub with **FastAPI & Django** frameworks
- Wrote smart home **automation** system w/ **relational SQLite DB** & matching **CRUD REST API** endpoints
- Displayed **smart device information in real-time** by implementing **WebSocket subscription** API
- Enabled sign-in w/ **QR Code** by reworking QR code token backend
- Performed **code review** on teammates' pull requests, validating new features against **edge cases**

TAMU Chinese School — January 2025 - Present
Programming Teacher — *College Station, TX*

- Taught classes of 16 elementary schoolers **programming logic**, **debugging**, & game development w/ **Scratch**
- Prepared **weekly slideshows** for each class session to aid in instruction
- Wrote custom exams to assess **problem-solving** skills and programming best practices

Aggie Competitive Programming Club — Janurary 2025 - Present
Web Officer — *College Station, TX*

- **Increased turnout** by **50%** for programming competitions by developing **promotional websites** in React
- **Facilitated prize distribution** by developing internal system to track problems solved

Engineering TA Organization — November 2024 - Present
Web Officer, Social Officer — *College Station, TX*

- **Promoted awareness** of exam review sessions by **overhauling UI** for promotional websites in **Figma**
- Connected freshman engineering demographic to academic resources by **planning events and promotions**

Projects

Magical Menu App — November 2024 - Present

- Mobile app (**deployed on app store**) efficiently displaying dining hall menus, **80 downloads** in 1st month
- Made load times **174x faster** (on average) by **caching** on both device and server (wrote **custom API** w/ AWS)
- **Fixed bug** in official app/website when rapidly switching mealtimes, using **asynchronous programming**
- Implemented **favorites system**, allowing users to mark preferred foods, using **sets**
- **Designed/programmed product page** (in Figma/React) to showcase app; **700 impressions** on app stores

Multithreaded Selenium Webcrawler — May 2025 - Present

- Contributed to **anti-phishing ML research** using Python-based **Selenium webcrawler**
- Compiled AI-accessible data by storing **over 44,000** scraped HTML pages in **SQLite database**
- **Increased speed** of webcrawler by **over 150%** using **multi-threading**

Honors

CodeForces (Competitive Programming, Like USACO) – 1319 Rating (top 35%) — November 2024
National Merit Foundation – National Merit Scholarship Finalist — May 2024
USA Computing Olympiad – Silver Division — January 2023

Skills

Asynchronous Programming, REST API, Version Control (Git), Java, Python, React Native, React, TailwindCSS, C++, Multithreading, AWS, NoSQL, JavaScript, HTML, CSS, SQL, Microsoft Azure, Vultr, IntelliJ IDEA, PyCharm, Visual Studio Code, Microsoft Office, Machine learning, pandas, scikit-learn, NumPy