Kevin Zheng

+1 (484)-954-8724 | zhenghaoyang141@gmail.com | linkedin.com/in/kevin-zheng-h7 | github.com/kevinzheng117

EDUCATION

Carnegie Mellon University

Pittsburgh, PA

B.S. in Information Systems, Additional Major in Computer Science

Aug. 2023 - May 2026

- Dean's List High Honors | GPA: 3.90/4.0
- Relevant Coursework: Fundamentals of Programming and Computer Science (Python), Concepts of Mathematics, Principles of Imperative Computation (C), Information Systems Milleux (HTML/CSS, JavaScript, SQL), Database Design & Development (PostgreSQL, MongoDB), Great Ideas in Theoretical Computer Science
- Extracurriculars: Tech4Society, Phi Delta Theta, Asian Students Association, Taiwanese Students Association Experience

Software Engineering Intern

Jun. 2024 - Jul. 2024

Oifu Technology Inc

Shenzhen, China

- Integrated MongoDB into the company's internal big data management and analytics platform, enhancing data accessibility and reducing query complexity for users by 40%
- Developed and implemented a whitelist mechanism and toggle feature to securely manage user access to the MongoDB engine for testing purposes, leveraging Apollo for tracking all configuration variables
- Collaborated in a structured development environment using Jira for task management, GitLab for version control, and Docker for deployment, conducting thorough code reviews, documenting code for team collaboration, and participating in sprint meetings to achieve platform update goals

Co-Founder Jun. 2024 – Present

Path To SWE

- Founded and developed a full-stack application allowing 200+ users to easily find, apply, and track tech internships and personal applications using a Next.js (React, Node), TypeScript, Tailwind CSS, and Postgres tech stack
- Designed and implemented RESTful API to perform user and event CRUD operations while optimistically updating UI, and secure user authentication using JWT with credentials or with Google OAuth 2.0
- Utilized multiple AWS Lambda functions, SQS, and Eventbridge to periodically web scrape and export new unique internship openings to Amazon RDS for PostgreSQL using BeautifulSzaoup4 and psycopg2

Undergraduate Research Assistant

Sep. 2024 – Present

LearnLab at Carnegie Mellon University

Pittsburgh, PA

- Developed the Next.js and React front-end for GPTutor-Math, an AI-powered tutoring platform for multiple CMU math courses, providing homework guidance to 500+ students
- Integrated ChatGPT to facilitate personalized learning, significantly enhancing student engagement and feedback
- Collaborated with a multidisciplinary team to deploy scalable AI solutions, utilizing Git for version control and Agile methodologies to ensure timely project delivery

Undergraduate Teaching Assistant

Jan. 2024 – Present

Carnegie Mellon University | 15-112 Fundamentals of Programming and Computer Science

Pittsburgh, PA

- Led weekly recitations for 20+ undergraduate students, utilizing real-world coding problems to explain Python concepts such as object-oriented programming, recursion, and algorithmic efficiency
- Conducted 3+ weekly office hours and small group sessions to provide personalized guidance to students
- Evaluated assignments and exams weekly, using detailed rubrics and delivering constructive feedback

Projects

C0 Virtual Machine | C, C0

Apr. 2024 – Apr. 2024

- Implemented a Virtual Machine to execute programs written in C0, a safe subset language of C developed at CMU
- Developed instruction set for C0 language, translating high-level operations into executable bytecode, optimizing performance and memory usage with properly implemented stack and heap allocation for the user

Ferretti Yacht Database Project | SQL

Apr. 2024 – Apr. 2024

- $\bullet \ \ Designed \ and \ spearheaded \ implementation \ of \ a \ relational \ database \ using \ MySQL \ for \ Ferretti \ Yachts \ to \ manage \ and \ analyze \ sale \ data \ for \ 1,132 \ luxury \ yacht \ sales \ around \ the \ US \ across \ 7 \ different \ dealerships \ from \ imported \ CSV \ files \$
- Performed advanced SQL queries to analyze Yacht sales calculating important metrics to identify sale trends

Time Locker: 112 Edition | Python

Nov. 2023 – Dec. 2023

• Developed a top-down shooter game with a unique time-warping mechanic using Python and CMU graphics

• Implemented irregular-polygon collision detection with vector mathematics and random enemy generation TECHNICAL SKILLS

Languages: Python, C, HTML/CSS, JavaScript, TypeScript, SQL (Postgres, MySQL, MongoDB)

Frameworks/Libraries: Next.js, React.js, Flask, Node.js, TailwindCSS, Prisma, Auth.js, Bootstrap, jQuery, pandas Developer Tools: Git, Jira, Docker, VS Code, Anaconda, IATEX, AWS, Vercel, Supabase, REST APIs, pgAdmin, Jupyter Notebook, Figma