Han Chen

LinkedIn | han.c91028@gmail.com | (212) 961-7000 | Brooklyn, NY | Portfolio

EXPERIENCE

AECOM Tishman   Aug. 2024 - Present

Senior Software Engineer (Full-Time Contract) – Python | REST API | Automation | Azure Cloud Services

- Developed a data extraction automation tool that streamlined the extraction of over 300GB of document data per project from Procore Project Management Information System (PMIS). Utilized **Python** libraries (**Jinja2**, **Pyppeteer**, **openpyxl**), and **REST APIs** to eliminate manual processes, significantly improving efficiency and accuracy.
- Built an automated data reporting system using Python (**pandas**, **NumPy**), **Azure Functions**, and **MS Power Automate** to generate and distribute weekly reports with key project financial metrics, enabling real-time insights.
- Optimized system **API** performance by over 70% through parallel processing and data **caching**. Eliminated costly data queries with **SQL** optimizations, enhancing system performance while reducing costs by more than 20%.

Port Authority of NY NJ   Feb. 2023 – Aug. 2024

Full Stack Software Engineer (Full-Time Contract) – React | .NET | TypeScript | SQL | CI/CD

- Migrated a legacy **.NET** Core backend (v3.14 to v8), resolving 150+ compatibility issues and reducing system load times by over 30% while upgrading security protocols, leading to over 25% increase in development efficiency.
- Led development of a PMIS system using **React** and **.NET**, deployed on **Azure DevOps** with **CI/CD** pipelines.
- Architected and developed a scalable backend with **C#** and **RESTful APIs**, optimizing **SQL Server** interactions for efficient data retrieval with robust validations, enhancing data integrity and system reliability.
- Developed and maintained **CI/CD** pipelines using **Azure DevOps**, automating build, test, and deployment processes across environments. Implemented branch protection and code review, optimizing the SDLC.
- Enhanced the **UI/UX** of internal tools using **React**, optimized performance through lazy loading techniques, creating pixel perfect implementation of the updated design with over 50% reduction in system load times.
- Created **ERP** system with Job Management and Budget Reporting using **SPFX**, **TypeScript**, and **SharePoint Lists**, automating job tracking and reporting, boosting job allocation by over 15%.

DBC Education and Tech Co. – Remote   Aug 2021 – Aug 2022

Programming Instructor | Python | SQL | Pandas | NumPy | OOP

- Designed and delivered a comprehensive data analysis curriculum for undergraduate and graduate students, covering **Python**, **SQL**, **Pandas**, **NumPy**, Data Visualization, and object-oriented programming, empowering students with industry-relevant skills.

TECHNICAL SKILLS

Programming Languages: JavaScript, TypeScript, Python, C#, Ruby, SQL, CSS, HTML, Command Line

Frameworks: React, Angular, Next.js, ASP .NET, Ruby on Rails, Express.js, Node.js, MERN, Django

Technologies: Redux, Tailwind, Media Query, AWS, Azure Cloud Services, DevOps, CI/CD, Webpack, REST API, OOP, MongoDB, PostgreSQL, Google Maps APIs, SQL Server, Git, Pandas, NumPy, Selenium, Power BI

PROJECTS

HanChen.dev – *web-responsive portfolio site* – **Next.js**, **TypeScript**, **Tailwind**, **Framer Motion**   Live Site | GitHub

Cozybnb – *Full stack web-responsive application*   Live Site | GitHub

- Built a web responsive Airbnb clone using **React Hooks**, **Redux**, **AWS S3**, **Google Maps APIs**, and **Ruby on Rails** backend with full **CRUD** operations, featuring interactive custom components.

Aviquest – *Full stack desktop application*   Live Site | GitHub

- Led a team of 4 to develop a **MERN**-based gamified task manager with to-do lists, character customization, and a rewards system, optimizing data storage and retrieval with **Express** and **MongoDB**.

EDUCATION

App Academy – *In-person Curriculum (Ruby on Rails, JavaScript)*   **New York, NY** Aug 2022 – Dec 2022

New York University - Tandon School of Engineering *B.A.S in Technology Management (STEM)*   **New York, NY** 2015