

Kevin Fan

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TECHNICAL SKILLS

HTML/CSS/SCSS, C++, Java, Python, JavaScript, Typescript, R, MATLAB, Mathematica, React, Redux, NodeJS, Express, SQL and NoSQL, Bootstrap, Jest, React Testing Library, Selenium, Puppeteer, Electron, Docker, Kubernetes, Kafka, Jinja, Flask, AWS, Git, Webpack, Grafana

PROJECTS

SQLizer

github.com/kfan1/Nothing

- A web-based application that allows users to visually interact with SQL databases to generate queries reducing the tedious need to memorize SQL query structure and syntax
- Built responsive and interactive user interface with Redux, allowing for centralized state management with the implementation of a store and Flux architecture. This approach not only ensured consistency across the application but also eliminated the need for prop drilling, streamlining data flow and boosting efficiency
- Modularized using React containers and components for easy maintenance, isolating testing, and a uniform codebase
- Architected Node.js/Express server to handle HTTP based on the middleware design pattern, with routers and controllers to modularize backend requests and handle CRUD functionality
- Authenticated users with Bcrypt applying hashing and salting for industry standard cyber security

Python Blog

github.com/kfan1/kevin-blog

- Created a full-stack blog written in Python taking advantage of Flask and Jinja for framework and templating, Werkzeug for password authentication, and SQLAlchemy for data storage

PROFESSIONAL EXPERIENCE

Open Source Labs ([ReKuberate Open Source](#))

New York, NY

Software Engineer

April 2023 – Present

- Collaborated with an Agile team, in a Scrum environment, to build a lightweight, visual representation of Kubernetes clusters to monitor pod health and metrics including uptime, availability, request per second, CPU usage, and memory
- Utilized AnyChart to display real time statistics on Kubernetes nodes visualized through interactive network graphs, allowing users to diagnose any failure points in their cluster immediately through color-coded nodes
- Adapted Grafana to present relevant data curated from Prometheus, embedded directly into the application by scrapping for embed URLs
- Compiled using Electron for users to have a dedicated GUI with cross-platform support
- Deployed through Docker for consistent performance on different environments with version control and CI/CD using Github Actions, all hosted on AWS Elastic Beanstalk
- Implemented frontend testing with Jest, backend with Supertest, and end-to-end with Puppeteer, allowing us to ensure availability in database CRUD functionality and consistency in pod status to match expected results
- Written in Typescript to main consistency throughout the code and facilitate clear code communication and ensure static typing to prevent bugs prior to deployment and enforce well-written code

Houwzer, Inc.

Philadelphia, PA

Real Estate Salesperson

December 2021 – January 2023

- Settled nine transactions during the first year with sales worth over \$4 million, despite increasing interest rates and a housing shortage
- Worked with residential clients to purchase and sell properties by managing expectations, negotiating, understanding market trends, and focusing on details
- Managed client and company information using Copper CRM, Asana, and Google Workspace

广州市晶品电子商务有限公司 (Guangzhou Jingpin E-Commerce Co., Ltd.)

Tianhe, Guangzhou, China

Application Developer, OEM Development Team

June 2018 – August 2018

- Debugged and reprogrammed in Java using Android Studio to improve user interface and experience
- Developed Zebra, a social media application that allowed users to schedule community events open to either a private group of invited users or to the public, eventually sold to Tencent for \$20 million USD
- Translated applications and documentation from Chinese into English

Starbucks

Lansdale, PA

Shift Manager

January 2014 – April 2021

Villanova University Physics Department

Villanova, PA

Teaching Assistant/Tutor

January 2017 – May 2019

PROFESSIONAL DEVELOPMENT & EDUCATION

Codesmith

New York, NY

Advanced Residency for Software Engineering

April 2023 – July 2023

Villanova University

Villanova, PA

Electrical Engineering

September 2019 - December 2020

- **Relevant Coursework:** Fundamentals of Electrical Engineering I & II, Signal Processing, Electronic Materials and Devices, Engineering Electromagnetics, Data Structures, Computational Thinking, Advanced Fourier Transforms

Eastern University

St. Davids, PA

Applied Mathematics

September 2015 - May 2019

- **Relevant Coursework:** Computer Science I & II, Discrete Mathematics, Number Theory, Differential Equations, Statistics, Math Logic

CERTIFICATES, ACTIVITIES & INTERESTS

Licenses and Certificates: PA Real Estate Salesperson License, PA Association of Realtors, Python Certificate from Udemy

The Other Type of Languages: Mandarin, Chinese and English

Activities: Volunteering for Bethesda Project, Intramural Basketball, Short Term Missions

Interests: Building Computers, Mechanical Keyboards, Snowboarding, Sports, Technology, Reading, Running