Sepehr Rafiei

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EDUCATION

University of California, Berkeley: College of Engineering

Bachelor of Science: Electrical Engineering & Computer Science

December 2024

Relevant Coursework: | Full-Stack | Server-Side Development using PHP | Client-Side Web Development | Database Management | IOS Development | Figma | Computer Security | Algorithms | Data Structures | Python Programming | Java Programming | Computer Architecture | Machine Learning | Artificial Intelligence | Discrete Mathematics and Probability Theory |

SKILLS

Front-End: React, Next.js, TypeScript, JavaScript, HTML, CSS, Tailwind CSS, Bootstrap, Material UI, Figma

API & Back-End: RESTful APIs, GraphQL, Node.js, Express.js, Flask, Django

Databases: PostgreSQL, Firebase, MongoDB, Microsoft SQL Server

Tools & Deployment: Git, GitHub, Netlify, Vercel, AWS, Docker, Postman, Chrome DevTools

Testing: Jest, React Testing Library, Cypress

Languages: English & Persian (Farsi) – fluent; Mandarin Chinese – limited

PROFESSIONAL EXPERIENCE

Novikov Beverly Hills

Beverly Hills, CA | December 2024 – January 2025

Freelance Software Developer

- Delivered a robust review summarization platform featuring a React frontend and a Django backend to analyze Yelp and Google Maps data.
- Integrated GPT APIs for AI-driven insights, generating actionable recommendations tailored to the restaurant's operational needs.
- Achieved an 80% reduction in manual processing time, empowering management with concise insights to identify recurring
 concerns and optimize decision-making.

Alcatel-Lucent Enterprise

Calabasas, CA | October 2021 – August 2022

Software/Network Engineer (Internship)

- Developed a **full-stack** web application (**React**, **TypeScript**, **Flask**, **PostgreSQL**) to virtualize network-switch topologies, replacing manual Visio diagrams and enabling real-time connection insights.
- Built a **C#** Windows application with **Microsoft SQL Server** to streamline inventory and shipping, eliminating paper-based tracking and improving operational oversight for thousands of switches.
- Created custom **Python** and **C**# libraries for automated **serial/SSH** communications, reducing manual data entry by enabling one-click device logging and rapid configuration.

Ventura County Community College District

Moorpark, CA | September 2021 - May 2022

Head Teaching Assistant

• Tutored over **100** students in **Java**, C++, and **Python**, enhancing their coding skills and significantly improving their exam performances through personalized instruction and custom learning resources.

PROJECTS

Personal Portfolio Website

Berkeley, CA | November 2024

- Built a responsive site using **React JS**, **Vite**, **Node**, and **TypeScript** by refactoring code into modular components.
- Implemented light and dark mode switching to enhance user experience.
- Managed version control with **GitHub** and deployed on **Netlify** for streamlined updates.

YouTube SafeGuard (Cal Hacks 9.0)

San Francisco, CA | October 2022

- Developed an interactive Chrome Extension front end to filter YouTube comments in real time, focusing on sleek **UI/UX** and dynamic **DOM** updates.
- Integrated Cohere's NLP APIs for rapid, accurate comment classification, elevating content moderation and user satisfaction.
- Leveraged a Django REST API for efficient data flow and authentication, ensuring a smooth and scalable front-end/back-end experience.

Ultimate Tic Tac Toe (TelePort)

Berkeley, CA | May 2024

- Built a Swift-based Ultimate Tic Tac Toe app using MVVM architecture for a modular and scalable codebase.
- Incorporated smooth animations and intuitive controls, delivering an engaging user experience.
- Designed the UI/UX in Figma and implemented strategic teleportation mechanics, winning "Most Fun iOS App" in the class.

A Secure File Sharing System

Berkeley, CA | November 2023

- Built a **Go**-based system using **AES-GCM** and **RSA** to ensure end-to-end file **confidentiality**, **integrity**, and **authenticity** in an untrusted database.
- Engineered tamper detection and fine-grained access control to safeguard user data against unauthorized modifications.
- Passed 100+ adversarial test cases without compromise, demonstrating robust defense against advanced attack vectors.