Arpan Rakesh Patel

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Availability: May 2024 - August 2024

EDUCATION

Northeastern University | Candidate for Master of Science in Computer Science   **Sep 2022 - Dec 2024**
Courses - Programming Design Paradigm, Building Scalable and Distributed Systems   *Boston, MA*

Sardar Vallabhbhai Patel Institute of Technology | B.E in Information Technology   **Jul 2017 - Jul 2021**
Courses - Analysis and Design of Algorithms, Software Engineering, Database Management System   *Vasad, India*

TECHNICAL SKILLS

Programming Languages	: Java, Python, C++, SQL, Swift, TypeScript, JavaScript, GoLang
Frameworks	: Node.js, JUnit, Flutter, ReactJS
Development & Database	: MySQL, MongoDB, HTML, CSS, Flask, React, Android, FireBase
Tools & Topics	: OOP, Linux, IoT, Restful API, n8n, Postman, Heroku, Java Networking, Shell Scripting
Cloud & DevOps	: Docker, Version Control(Git), GitHub Actions, Google Cloud Platform, Kubernetes

WORK EXPERIENCE

Sanrel LLC | *Software Developer Lead Intern*   **Jul 2023 - Dec 2023**
SQL, NodeJS, Docker, Agile, Microservices   *Worcester, MA*
- **Led** software team projects, achieving 20% faster project completion through smooth coordination and collaboration.
- Successfully set up and **integrated server** with four hardware devices, ensuring seamless communication functionality.
- Implemented **SQL**-based inventorying system using SnipeIt, boosting inventory efficiency and accuracy by 30%.
- **Designed** robust SQL database for product inventory, shipping, reducing processing time by 40%.

Northeastern University | *Graduate Teaching Assistant*   **May 2023 - Jul 2023**
iOS, Swift, UIKit, MVC   *Boston, MA*
- Assisted the instructor in grading assignments, exams, and projects for 50+ students of CS 4520 Mobile Application class.
- **Conducted** weekly review sessions and office hours to offer **dedicated and personalized support** to students.
- Engaged actively with students in the course by offering **comprehensive feedback** on their progress and performance.

Scudo Systems LLP | *Co-founder and Software Developer*   **Jul 2019 - Jul 2022**
Python, Raspberry Pi, IoT, APIs   *Ahmedabad, India*
- Developed a **custom software system** to provide **real-time tracking** monitor devices which had 90% accuracy.
- Restructured **GPS algorithm** which provides 10-meter radius accurate location and improves tracking efficiency.
- Conducted **extensive testing and debugging** for bug-free software with 40% faster response time.

Snapy Inc | *FullStack Intern*   **May 2021 - Jul 2021**
React, Tailwind CSS, NoSQL   *Bangalore, India*
- **Introduced 5+ new features** using ReactJS for Snapy's platform, refining user experience boosting conversion rates.
- Ensured **platform's design** consistency resulting in enhanced user satisfaction and listing 100+ products.
- Performed code optimization to **enhance platform performance**, resulting in **33% reduction in page load times**.

ACADEMIC PROJECTS

Key-Value Store Server | *Distributed Systems Application*

Tech Stack: Java, UDP, TCP, Triggers, Socket programming, Multithreading
- Supported **UDP and TCP** communication protocols, allowing seamless client-server interaction with a 98% success rate.
- Utilized hash map, for **efficient storage** and retrieval up to 10,000 key-value pairs with an average access time of 5 ms.

Stock Simulator | *Java Application*

Tech Stack: Java, Java Swing, JUnit, Object Oriented Design, XML, JSON, AlphaVantage API
- Collaborated on **virtual stock simulator** for learning stock market using **MVC** and **Command design patterns**.
- Connected with **AlphaVantage API** to facilitate purchasing and optimized data caching for 70% efficiency boost.

PROFESSIONAL ACCOMPLISHMENTS

- Chapter Lead of **Mozilla Campus Club** at our campus, co-organized **Flutter Vadodara**, served as trusted **Mozilla Rep**.
- Published **research paper** "Parkup" as co-author in International Research Journal of Engineering and Technology.
- Contributed to **OpenSource** development of the Flutter Shortcut Widget via "Adopt a Widget" campaign on GitHub.