



Sahil Patel

PROFESSIONAL SUMMARY

Sahil Patel is a passionate software developer with a craving for tackling complex problems and honing new skills. His passion for coding stems from their academic endeavors, particularly in modules like Robotics, where they utilized MATLAB to design workspaces for thumb and index finger motion. He has since continued to evolve his skillset through creation of full stack applications, such as his F1 data graphing and analysis website, and educational programs like the Bright Network Technology Academy Bootcamp. His technology stack involves Java (Spring Framework), PostgreSQL, React, Angular & Python. His hunger for a challenge and advancing his skills will really enable him to excel in dynamic environments and consistently deliver exceptional results.

TECHNICAL SKILLS

Programming: Java, JavaScript, Angular, TypeScript, HTML5, CSS3, SQL, Spring, Spring Boot, JDBC, Jackson, JPA, jQuery, Node, webpack, Babel, Maven, npm, Python, C++ & MATLAB, React, Node.js, Azure Functions
Software: Eclipse, VS Code, Git, GitHub, cmd, pgAdmin
Databases: PostgreSQL, MongoDB
Certifications: AWS Cloud Practitioner Foundational
Websites: <https://ambitious-pebble-02008e903.2.azurestaticapps.net/>

PROFESSIONAL EXPERIENCE

COOK SYSTEMS – Memphis, TN
FastTrack Developer

04/24 – Present

Assessment #1

- Developed a RESTful API simulating Twitter functionality, utilizing CRUD operations to interact with a PostgreSQL database server, enabling features such as posting tweets.
- Implemented and managed database creation, updating, and relationships based on Entity Relationship Diagrams (ERDs). Utilized the Spring Framework, JPA, Hibernate, for object-relational mapping between Java POJOs and DTOs to PostgreSQL.
- Reduced boilerplate code by efficiently coding using libraries such as MapStruct and Lombok.
- Followed a test-driven development (TDD) approach by utilizing Postman and Newman CLI, ensuring robust API functionality.

Environment: Java, Spring Boot, PostgreSQL, PGAdmin, Postman

Assessment #2

- A
- B
- C
- D

Environment:

Assessment #3

- A
- B
- C
- D

Environment:

Krishna Marriage – London, UK

10/23 – 01/24

Volunteer Developer

- Built a testing environment using docker, such as using a MongoDB image as a test database.
- Automated the creation of full stack testing environments through creation of shell scripts (database, app, api)

REPLY – London, UK

08/23 – 08/23

Data Science Intern

- Predicted sales trends by employing LightGBM and Facebook Prophet models, utilising AWS Sagemaker Notebook Instance.
- Conducted model selection through carrying out exploratory data analysis using pandas library in Python.
- Designed and implemented a question-answering chatbot tailored for user provided documents, incorporating Langchain framework and understanding the importance of prompt engineering.

ADDITIONAL PROJECTS

F1 Website

07/22 – 05/23

- Developed a comprehensive full-stack application utilizing React for the frontend, Node.js for user authentication and Git for version control and continuous development.
- Refactored the backend to leverage Azure Functions for cost savings.
- Obtained Formula 1 data from an online API and implemented visually appealing graphs showcasing crucial metrics such as drivers' fastest lap times and race lap times using chart.js.

Environment: Node.js, Azure Functions, Azure Static Web Apps, MongoDB, Git, HTML5, CSS, JavaScript, React

Conversa API

01/24 – 04/24

- Collaborated in development of Restful API to mock a chat API
- Created ERDs and Class Diagrams for users, messages and chatrooms tables
- Wrote detailed documentation for API usage instructions and endpoints
- Fulfilled the role of SCRUM master following AGILE workflow for the project.

- Managed project through Trello Kanban board and Gantt Chart for task delegation, issue management and project timeline

Environment: Java, Spring, Spring Boot, JPA, Maven, PostgreSQL, Git, Trello

Blog Frontend

01/24 – 04/24

- Developed a front-end for a Blog API allowing users to view, post, edit and delete blogs as well as leave comments and likes to various blogs.
- Created wireframes and component diagrams whilst keeping UX/UI design in mind.
- The front-end enables

Environment: HTML5, CSS, JavaScript, React, Git

Capstone Project

01/24 – 04/24

- Produced a full stack application for a packaging companys' delivery app for drivers.
- Served as project manager, ensuring adherence to project timelines and effectively managing the software development team.

Environment: Java, PostgreSQL, React, Git, JavaScript, CSS, HTML5 & Material UI.

Python Programming

mm/yy – mm/yy

- Automated encryption/decryption mechanisms using the Caesar Cipher, while gaining valuable insights into leveraging diverse data structures.
- Created an engaging 2D ping pong game with a Tkinter-based GUI, enabling me to gain valuable insights into incorporating user requirements into the game design process.

Environment: Python

Robotics UG

mm/yy – mm/yy

- Effectively programmed a micro-controller integrated onto a Pololu 3Pi+ robot, enabling me to automate the line following task.
- Estimated slope inclination angles by harnessing the feedback signal from a PID controller.

Environment: C++, Arduino Leonardo

Bio-Inspired Artificial Intelligence

mm/yy – mm/yy

- Prototyped a species recognition model on MATLAB for wide area animal monitoring using drones
- Constructed a comprehensive business model, encompassing initial funding strategies, projected timeframes for capital investment recovery, and consideration of ethical and regulatory implications as part of multidisciplinary team.

Environment: MATLAB

EDUCATION

Cook Systems FastTrack Java Program – Memphis, TN

04/24 – Present

Concentrated Java Frameworks and developer tools training

Bright Network Technology Academy Bootcamp – London, UK 04/24

01/24 –

Full stack development using Java, PostgreSQL, and React.

