SHAIL PATEL

patelshail233@gmail.com | +1 (415) 769-8468 | San Francisco, CA
https://shaillpatell.netlify.app | Linkedin | Github

EDUCATION

San Francisco State University, San Francisco, California, USA [GPA-3.6/4] **2023- 2025**
Master of Science: Computer Science

- *Relevant Coursework:* Software Engineering, Database Management, Analysis of Algorithms, Artificial Intelligence, iOS development.

Vellore Institute of Technology, Tamil Nadu, India [GPA-3.5/4] **2019- 2023**
Bachelor of Science: Computer Science

- *Relevant Coursework:* Web Development, Object Oriented Programming (OOP), Data Structures, Machine Learning, Cloud Computing.

SKILLS

Programming Languages: JavaScript, Python, C/C++, Swift
Database: MySQL, Oracle DB, MongoDB, PostgreSQL
Frontend Technologies: HTML, CSS, React.js , D3.js, Bootstrap
Backend Web Technologies: Next.js, Node.js, Express, RESTful API, Django
Cloud Platforms: AWS, Azure
Tools/Softwares: JIRA, Postman, Docker, Git, Directus, Snowflake

PROJECTS

Edu Bridge: A Learning Management System (MySQL, Express, React.js, Node.js, Jira, AWS, Directus)

- Spearheaded the full stack development of a comprehensive Learning video streaming application, Edu Bridge, utilizing the MERN stack. This project mirrors Canvas' functionality, offering video uploading, sharing, and real-time streaming capabilities.
- Orchestrated project workflow and task management using JIRA. Built a modern and responsive web design using HTML/CSS and React.js. Backend API endpoints and features using Node mailer and multer. Used Directus for Content Management.
- Implemented MySQL database for efficient data storage, coupled with Express and Node.js for scalable backend services. Deployed using AWS EC2. Crafted an interactive front-end experience with React, optimized for performance and cross-browser compatibility.

SFO Passenger Traffic Visualization System (Next.js, D3.js, Node.js, PostgreSQL, Prisma)

- Developed and maintained a real-time data visualization platform to analyze passenger traffic at San Francisco International Airport (SFO), leveraging a dataset of 35.3k rows, resulting in a 25% increase in data processing efficiency.
- Implemented interactive visualizations using D3.js on a Next.js web application, providing insights into peak travel periods, airline performance, and passenger behavior, which led to a 30% improvement in operational decision-making speed.
- Integrated PostgreSQL for efficient data storage and retrieval, with backend services managed using Prisma and Node.js, reducing database latency by 40% and ensuring seamless and scalable data handling.
- Enhanced operational efficiency through predictive analytics and comparative metrics, aiding strategic planning and resource allocation at SFO, resulting in a 20% reduction in resource allocation time.

No-Escape: Action maze chase game (Python, PyGame, Artificial Intelligence)

- Led the development of an innovative action maze chase Human-Computer Interaction (HCI) application using Python and Pygame.
- This project featured the implementation of an AI-based opponent that dynamically follows the player, using the A* algorithm to
- determine the optimal path based on the player's movements. Designed and implemented a user-friendly GUI to enhance user engagement and experience.

WORK EXPERIENCES

Graduate Teaching Assistant- *San Francisco State University*- San Francisco, California- USA **[Jan'24 – May'24]**

- Assisted in grading assignments and exams for graduate course CSC810 – Analysis of Algorithms in Computer Science Department at San Francisco State University.

Software Developer- *Flowjet Industries,* Ahmedabad-India (Node.js, MongoDB, Machine Learning) **[Jan'23– May'23]**

- Orchestrated the backend development and database management of the company E-commerce portal using Node.js and MongoDB. Built API endpoints for the website and reduced database latency by 45%.
- Utilizing machine learning algorithms, a 30-day demand forecast for a product was generated. This forecast, which achieved approximately 70% accuracy on real-time seller data, can assist in choosing a location that can fulfill the order.

Software Development Intern– *JPAL South Asia,* New Delhi-India (React.js, Node.js,, Snowflake) **[May'22 – July'23]**

- Developed and implemented a digital communications strategy for the organization's website, aligning with broader communications goals.
- Accomplished a 30% increase in user engagement, as measured by website analytics, by developing and implementing a comprehensive digital communications strategy.
- Achieved a 40% faster resolution time for user issues, as measured by support ticket data, by responding to user inquiries promptly and coordinating with external developers for complex troubleshooting.

Data Science Intern -*The Sparks Foundation,* Singapore (Python, Machine Learning, Data Analysis) **[Aug'21 – Sept'21]**

- Engaged in the development and implementation of Supervised Machine Learning models, utilizing algorithms such as Logistic Regression, Support Vector Machine (SVM), and K-Nearest Neighbors to analyze and derive insights from real-life datasets.
- Implemented Machine Learning algorithms and VGG16 architecture of CNN model to achieve an accuracy of around 90%.

CERTIFICATIONS

- Amazon Web Services (AWS) Certified Solutions Architect
- Meta Certified Backend Engineer
- Code Path - Advanced Technical Interview Prep