

# SHRI PATEL

+1(224) 659-3223 ◇ Chicago, IL

US Citizen ◇ shripatel1634@gmail.com ◇ <https://www.linkedin.com/in/shri-patel/> ◇ <https://github.com/shri-124>

## SKILLS & CERTIFICATIONS

**Languages:** JavaScript, TypeScript, Python, C, C++, Java, R, Go, C#, SQL, GraphQL, HTML, CSS.

**Tools:** MS Office, Docker, Kubernetes, Tableau, VS Code, Linux, .NET, Jira, Confluence, Agile/Scrum, Git, GitHub, GitLab.

**Frameworks:** Express.js, React, Angular, Jest, Spring Boot, Flask, PyTorch, TensorFlow, Pytest, Gin, Go-Kit, Ginkgo/Gomega, Postman.

**Databases & Cloud Platforms:** PostgreSQL, MySQL, SQLite, MongoDB, Google BigQuery, AWS, GCP, Azure.

**Certifications:** Google Data Analytics Professional Certificate (R, BigQuery, Tableau, SQL).

## EXPERIENCE

### Software Engineer Intern, Vail Systems

06/2023-08/2023, 06/2024-08/2024

- Engineered a Golang-based API service as part of a microservices architecture on a cloud-based SaaS platform, performing software development to export millions of records from MongoDB into Kafka pipelines via TCP/IP, then into structured CSVs stored in Amazon S3 for scalable, secure, and reliable downloads; ensured 100% data export reliability.
- Improved system efficiency by 65% and usability by 80%+ for enterprise clients by reducing database load and enabling high-volume data retrieval.
- Achieved 100% test coverage on unit and functional tests by utilizing Ginkgo and Gomega frameworks and Docker to build and run functional tests.
- Resolved 20+ production tickets with a 95% on-time completion rate, coordinating with the project manager and utilizing Git/GitLab for version control, code review, and continuous integration, while following Agile-Scrum practices with biweekly sprints and daily stand-ups.
- Participated in software architecture design reviews to ensure scalable API system design; implemented modular code design.
- Presented project deliverables and business impact to senior leadership, including a detailed design process flowchart and system architecture overview, and received positive feedback from 5+ executives for clarity, technical depth, scalability, and alignment with strategic business goals.
- Developed a bank IVR application using TypeScript and Express.js, building 5+ features including dial options, call redirection, and call recording via Vail's RESTful FreeClimb API, leveraging real-time programming to enable low-latency responses and enhance call handling efficiency by 40%.
- Engineered comprehensive API test suites with Postman and Jest for unit testing and functional testing, achieving 100% coverage while reinforcing system security through robust JSON-based authentication protocols, and utilizing Git/GitLab for version control and collaborative code reviews.
- Increased department efficiency by organizing and standardizing requirements gathering processes, updating API technical documentation in response to version updates, and improving cross-team alignment—accelerating the project initiation phase by 20% and reducing onboarding confusion.
- Presented the final team project to top executives and investors, emphasizing data-driven insights that showcased a projected 30% cost savings and 60% user engagement growth, demonstrating the project's strategic value and business impact.

### C++ Computer Science Teaching Assistant, University of Illinois at Chicago

01/2024-05/2024, 08/2024-12/2024

- Taught core C++ concepts to 100+ students, covering conditions, loops, functions, object-oriented programming, data structures, algorithms, pointers and memory management, exception handling, file I/O, debugging, and low-level compiler topics such as byte ordering and memory storage.
- Facilitated 30+ hands-on labs and evaluated 600+ student projects, delivering timely and constructive feedback to enhance understanding.
- Led weekly office hours, delivering 50+ personalized support sessions that boosted project completion rates by 21%.
- Collaborated with faculty to refine assessment criteria and project specifications, contributing to a 15% increase in average student exam scores and a 20% increase in student satisfaction scores based on end-of-semester surveys.

### IT Endpoint Management Engineer, University of Illinois at Chicago

06/2022-08/2022

- Provided IT support for 1,000+ university staff and students, managing high-volume tickets and resolving 95% within SLA.
- Administered software updates across 100+ lab/classroom computers, both remotely and in-person.
- Automated software deployments using Microsoft Intune, packaging academic apps for 1,000+ devices and improving efficiency by 40%.

## PROJECTS

**NASA Space Apps Hackathon** | *JavaScript, Node.js, Meteomatics API, Firebase, MongoDB Atlas, HTML, CSS, AWS*

- Led a team in designing and developing a crop water prediction app, overseeing architecture decisions and task delegation while contributing to backend development. Implemented user authentication with Firebase, managed scalable data storage using MongoDB, and deployed the backend on AWS for high availability. Developed a custom machine learning algorithm leveraging Meteomatics API data to predict water usage with 90% accuracy.

**Handwritten Digit Recognition with Deep Learning** | *Python, PyTorch, R, NumPy, Scikit-learn, Matplotlib, PostgreSQL, SQLite3, Tableau*

- Developed and trained a PyTorch CNN achieving 98.6% accuracy on 10,000 MNIST images; validated performance with confusion matrix and per-class precision (99.6%), recall (99.0%), and F1 score (99.3%) in R. Applied data augmentation and hyperparameter tuning; serialized model outputs to SQLite for fast local access and exported to PostgreSQL for long-term storage, with visualizations in Tableau.

## EDUCATION

**BS in Computer Engineering** | University of Illinois at Chicago

May 2025