

PRANAV SHIVKUMAR

pranavshivkumar3@gmail.com

+1 (732) 718-0664

<http://linkedin.com/in/pranav-shivkumar>

<http://github.com/pranavshivk97>

Career Experience

Software Engineer, Cisco Systems, Research Triangle Park, NC

Jun 2022 – Present

- Spearheaded the development of Roomhub, a web application that enables smart device control in Cisco's smart buildings, enhancing device management efficiency by 80% through Node.js backend development and RESTful API integration.
- Engineered OAuth2 token-based authentication for GCP Cloud SQL Postgres instances using Node.js, significantly fortifying database security and improving operational speed and data integrity.
- Orchestrated Roomhub's CI/CD deployment with GitHub Actions and Kubernetes, ensuring scalable, resilient infrastructure across multiple environments.
- Revamped the CCAT Provisioning Tool with Webex API notifications using Python's FastAPI framework resulting in a 40% increase in user engagement and a 60% boost in tool efficiency.
- Designed automated backup systems for Cisco Expressways, leveraging Docker for containerization, improving data recovery by 80%, and ensuring GCP compliance.
- Enhanced system efficiency and response times by optimizing Cisco Unified CallManager's tooling automation processes.
- Directed the strategic migration of automation tools from Django to a FastAPI/React platform, employing Python, Go, Docker, and Kubernetes to facilitate a transition to a microservices architecture, which resulted in improved scalability and maintainability.

Software Engineer, Tata Consultancy Services, New Jersey, USA

Jun 2021 – May 2022

- Orchestrated the migration of database servers, utilizing SQL Server and SQL Server Integration Services (SSIS), which streamlined the application release process and enhanced database performance by 30%.
- Engineered a RESTful API for managing insurance agent and campaign data, employing C# and ASP.NET, resulting in a 20% reduction in data retrieval times and a 10% increase in transaction throughput.
- Developed a secure ASP.NET Web API in C#, which improved user authentication and order management processes, leading to a 15% increase in system security and a 10% enhancement in order processing efficiency.

Software Engineer Intern, BetterCapital.us, Cupertino, CA

Mar 2021 – June 2021

- Single-handedly engineered a full-stack payment processing application in an Agile setting, using MongoDB, React.js, Node.js, and Redux, which resulted in a 50% increase in transaction processing speed and a 20% uptick in user registrations.
- Designed and implemented secure RESTful APIs leveraging Plaid API and Stripe ACH, enabling seamless bank and credit card transactions, which enhanced transaction capabilities by 25% and reduced processing errors by 40%.
- Developed a robust user registration module with Passport.js, streamlining the authentication process and improving login efficiency by 60%.

Technical Proficiencies

Programming Languages:	Python, JavaScript/TypeScript, C++, Go, SQL, HTML
Databases:	MySQL, MongoDB, Postgres, SQL Server
Web Frameworks:	FastAPI, Django
Cloud Platforms:	AWS, GCP
Tools:	React, Docker, Kubernetes, git

Educational Background

Master of Science (MS), Electrical and Computer Engineering, May 2021 | Rutgers University, New Brunswick, NJ

Bachelor of Engineering (BE), Electronics and Communication Engineering, 2019 | PES Institute of Technology, Bangalore, India

Technical Projects

- **StockUp – Stock Price Predictor:** Crafted a full-stack stock price predicting web application with the help of a neural network model designed with Keras and TensorFlow using Django, Python, HTML, CSS, and MySQL.
- **AWS Database Querier:** Hosted a web application on an AWS EC2 instance to query RDS database and Redshift data warehouse instances with Extract-Transform-Load (ETL) techniques using JavaScript, HTML, CSS, and Python.