

Suchit S

Chicago, Illinois, United States | suchitswarna9@gmail.com | (972) 677-8171 | [linkedin.com/in/suchit-s-a09411386](https://www.linkedin.com/in/suchit-s-a09411386)

PROFESSIONAL SUMMARY

Senior Python Developer with 12+ years of experience delivering scalable, secure, and high-performance backend solutions across Healthcare, Banking, Insurance, Retail, and Aviation domains, with hands-on experience supporting end users and production systems in regulated environments. Experienced in Python, FastAPI, Flask, Django REST Framework, Microservices, REST APIs, and Cloud-Native Architecture on Microsoft Azure and AWS. Strong background in designing and developing scalable backend applications, event-driven systems, and containerized solutions using Docker, Kubernetes (AKS/EKS), and Helm. Hands-on experience building AI/ML and MLOps solutions using TensorFlow, PyTorch, MLflow, Azure ML, and Azure OpenAI. Skilled in developing intelligent platforms for fraud detection, patient risk scoring, document intelligence, and conversational AI solutions. Proficient in Azure DevOps, GitHub Actions, AWS CodePipeline, Terraform, Kafka, Azure Event Hubs, Azure Data Factory, AWS Glue, Azure SQL, Cosmos DB, PostgreSQL, MySQL, DynamoDB, and Redis. Experienced in implementing secure authentication and authorization using OAuth 2.0, JWT, Azure AD, AWS Cognito, RBAC, and encryption practices to support HIPAA and SOC 2 compliance. Strong experience collaborating with cross-functional teams, leading code reviews, mentoring developers, and delivering reliable cloud-native solutions using Agile/Scrum methodologies.

EDUCATION

ICFAI Foundation for Higher Education

Bachelor's , Computer Science

Jun 2008 - Jun 2012

SKILLS

Programming Languages: Python, SQL, PL/SQL, Shell scripting

Frameworks & Libraries: FastAPI, Flask, Django, Django REST Framework, LangChain, LangGraph, Semantic Kernel, Pandas, NumPy, Swagger/OpenAPI

Cloud Platforms: Microsoft Azure, Azure App Services, Azure Functions, Azure ML, Azure DevOps, Azure Event Hubs, AWS, AWS Lambda, AWS Glue, AWS Cognito, AWS KMS, AWS CodePipeline, AWS CodeDeploy, Elastic Beanstalk, Amazon EC2, Amazon S3, Amazon RDS, Azure AD, Azure SQL, Azure AI Search, Azure Monitor, Azure Cosmos DB, Azure Traffic Manager, Azure Logic Apps, Azure Blob Storage, AKS, Amazon ECS, Amazon EKS, Azure OpenAI, Google Cloud Platform, Virtual Machines, Cloud Server Environments

Databases: Azure SQL, Cosmos DB, PostgreSQL, MySQL, DynamoDB, Redis, Oracle

Tools & Software: Docker, Kubernetes, Helm, Git, GitHub, Terraform, Jira, Confluence, Application Insights, AWS CloudFormation, AWS X-Ray, pytest, unittest, Postman, Selenium, CI/CD, ELK Stack, Logging frameworks, Linux, Unix, SVN, Bicep, ITIL, Incident Management, Change Management, Patch Management, Backup and Disaster Recovery, System Auditing, Vulnerability Assessment, Zabbix, Nagios, PowerShell

Soft Skills: Agile/Scrum, Mentoring, Code Reviews, Secure Coding, Collaboration, End-User Support, Troubleshooting, Knowledge Base Documentation, Cross-Functional Coordination, On-Call Rotation

AI/ML & GenAI: TensorFlow, PyTorch, MLflow, MLOps, Model versioning, Continuous deployment, Prompt engineering, LLMs, Retrieval-Augmented Generation (RAG), Agentic AI

Security & Compliance: OAuth 2.0, JWT, RBAC, PHI/PII, HIPAA, SOC 2, Encryption (at rest/in transit), Key Vault

Event-Driven & Streaming: Kafka, Azure Event Hubs

WORK EXPERIENCE

Banner Health | Senior Python Developer

May 2024 - Present

- Provided **Level 1/2 support** for clinical and corporate end users, troubleshooting workstation and software issues across **desktops, laptops**, and mobile endpoints, and documenting repeatable fixes into a shared knowledge base for the support team.
- Designed, developed and implemented scalable RESTful APIs using Python, FastAPI and Flask to support high-throughput patient data processing with robust error handling and observability.
- Led end-to-end development of microservices using Docker, Kubernetes (AKS) and Helm charts to deploy containerized healthcare solutions across Azure environments with zero downtime.
- Architected and optimized cloud-native solutions using Microsoft Azure (App Services, Functions, Logic Apps) to modernize legacy systems and support real-time data flows across distributed applications.
- Built and maintained data ingestion pipelines using Python, Apache Kafka, Azure Event Hubs and Azure Data Factory to ensure reliable streaming and batch ETL of clinical and operational datasets.
- Implemented secure authentication and authorization using OAuth2.0, JWT, and Azure AD to enforce role-based access control and safeguard PHI/PII according to HIPAA requirements.
- Integrated Azure SQL Database, Cosmos DB, and Blob Storage with application layers to support structured and unstructured healthcare data with efficient indexing and query patterns.
- Developed automated CI/CD pipelines using Azure DevOps, GitHub Actions, and Terraform to standardize deployments, reduce manual errors, and maintain audit-ready change control.
- Designed RAG pipelines using LangChain, Azure AI Search, and Azure OpenAI for semantic document retrieval and question-answering.
- Implemented LangGraph to orchestrate multi-step AI workflows and agent interactions.
- Utilized Semantic Kernel to orchestrate AI skills, prompt execution, and enterprise workflow automation.
- Collaborated with cross-functional teams, including Data Science, QA, DevOps, and Product Owners, to define requirements, prioritize backlogs, and deliver high-impact features for electronic health records (EHR) systems.
- Conducted code reviews, enforced best practices, and mentored junior engineers to uphold secure, maintainable code standards and accelerate team productivity through pair programming.

- Designed and implemented Retrieval-Augmented Generation (RAG) pipelines using Azure OpenAI and Azure AI Search to enable accurate document retrieval and context-aware responses.
- Developed enterprise AI chatbots using Python, FastAPI, and Azure OpenAI for clinical knowledge assistance and patient support.
- Built LLM-powered REST APIs for document summarization, question answering, and intelligent search capabilities.
- Implemented prompt engineering techniques to improve response quality, reduce hallucinations, and optimize LLM performance.
- Developed Agentic AI workflows capable of orchestrating multiple tools and APIs to automate healthcare business processes.
- Designed and deployed real-time monitoring and alerting using Azure Monitor, Log Analytics and Application Insights to ensure 99.9% uptime and rapid detection of performance anomalies.
- Implemented robust unit, integration, and contract testing using pytest, Postman/Newman and Selenium to catch defects early and maintain high code quality in fast-paced sprint cycles.
- Developed and operationalized AI/ML model inference APIs using TensorFlow, PyTorch, and MLflow to deliver predictive insights for patient risk scoring and clinical decision support.
- Collaborated with Data Science teams to productionize AI/ML workflows and automate retraining pipelines using MLOps frameworks, enabling continuous improvement of predictive healthcare models.
- Integrated GenAI capabilities to enhance intelligent clinical summarization, auto-coding, and virtual assistant functionality within patient engagement platforms.
- Performed root-cause analysis of production issues, implemented proactive remediation using Azure Service Health, and collaborated with support teams to drive rapid resolution.
- Drove technical roadmap discussions and evaluated new tools and frameworks like Apache Airflow, Django REST Framework, and Redis caching to improve scalability, throughput, and system responsiveness.
- Collaborated with security and compliance teams to perform vulnerability assessments and implement encryption-at-rest and in-transit using TLS, Azure Key Vault, and secure coding guidelines to maintain regulatory compliance.

C&F Bank | Senior Python Developer

Jan 2022 - Apr 2024

- Designed and developed enterprise-grade banking applications using Python on Microsoft Azure, building secure, scalable backend services that processed high-volume financial transactions while adhering to regulatory and compliance standards.
- Architected cloud-native solutions leveraging Azure App Services, Azure Functions, and Azure API Management, enabling high-availability microservices and seamless integration with core banking platforms.
- Implemented advanced AI/ML models for fraud detection, credit risk scoring, and customer behavior analysis using Azure Machine Learning, improving decision accuracy and reducing false positives across banking workflows.
- Built data pipelines using Azure Data Factory, Azure Synapse Analytics, and Azure SQL Database, ensuring reliable ingestion, transformation, and analytics of structured and semi-structured banking data.
- Developed RESTful and event-driven APIs using FastAPI, Flask, and Azure Service Bus, enabling secure real-time data exchange between internal banking systems and third-party financial services.
- Integrated AI/ML inference services into production systems using Azure ML Endpoints and Azure Kubernetes Service (AKS), supporting scalable model deployment and real-time predictions for financial use cases.
- Led MLOps implementation using Azure DevOps, ML pipelines, and CI/CD automation to streamline model versioning, training, validation, and deployment across multiple environments.
- Designed GenAI-powered solutions using Azure OpenAI, enabling intelligent document processing, automated customer insights, and conversational banking assistants while maintaining data privacy and governance.
- Developed Agentic AI applications using LangGraph to automate loan processing, customer onboarding, and document verification workflows.
- Integrated vector databases and semantic search capabilities using Azure AI Search to improve contextual retrieval and response relevance for enterprise banking applications.
- Optimized backend performance through Azure Monitor, Application Insights, and distributed tracing, proactively identifying bottlenecks and improving API response times for mission-critical banking services.
- Implemented robust security practices using Azure Active Directory, Key Vault, role-based access control, and encryption standards to protect sensitive financial data and meet banking compliance requirements.
- Developed scalable data processing solutions using PySpark, Azure Databricks, and Blob Storage, enabling advanced analytics and reporting on large transactional datasets.
- Designed secure enterprise AI chatbots capable of retrieving information from internal banking knowledge repositories.
- Developed Agentic AI solutions to automate customer onboarding, loan document analysis, and workflow execution.
- Collaborated with product owners, business analysts, and QA teams in an Agile/Scrum environment, translating banking requirements into high-quality technical solutions with timely deliveries.
- Automated infrastructure provisioning using Azure ARM templates, Bicep, and scripting, ensuring consistent, repeatable, and compliant cloud environments across development and production.
- Enhanced system reliability by implementing fault-tolerant architectures with Azure Load Balancer, Traffic Manager, and resiliency patterns aligned to financial industry best practices.
- Performed advanced database tuning and optimization using Azure SQL, Cosmos DB, and indexing strategies, improving query performance and reducing operational latency.
- Led code reviews, enforced best practices, and mentored junior developers on Azure Python standards, clean architecture, and secure coding guidelines within banking systems.
- Delivered end-to-end solutions integrating AI/ML related skills, cloud automation, and modern DevOps practices, ensuring scalable, intelligent, and future-ready banking platforms on Azure.

Homesite Insurance | Senior Python Developer

Sep 2019 - Dec 2021

- Designed and developed scalable backend services using Python, Flask, and FastAPI, deploying cloud-native applications on AWS EC2, AWS Lambda, and Elastic Beanstalk to support high-volume insurance policy and claims processing systems.
- Architected event-driven and serverless solutions leveraging AWS Lambda, Amazon SQS, SNS, and Step Functions, enabling real-time underwriting workflows, automated notifications, and resilient asynchronous processing across distributed systems.
- Built and optimized RESTful and GraphQL APIs using Python, FastAPI, and Swagger/OpenAPI, ensuring secure, high-performance integrations with third-party insurance platforms, rating engines, and internal microservices.
- Implemented data ingestion and transformation pipelines using AWS Glue, Python, and Pandas, processing structured and semi-structured insurance datasets stored in Amazon S3 and enabling downstream analytics and reporting.

- Designed relational and NoSQL data models using Amazon RDS (PostgreSQL/MySQL) and DynamoDB, optimizing query performance, indexing strategies, and data consistency for policy, customer, and claims domains.
- Developed containerized microservices using Docker and orchestrated deployments through Amazon ECS and EKS, improving scalability, fault tolerance, and release velocity across AWS environments.
- Automated CI/CD pipelines using AWS CodePipeline, CodeBuild, CodeDeploy, and GitHub, enabling continuous integration, automated testing, and zero-downtime deployments across multiple environments.
- Integrated robust authentication and authorization mechanisms using AWS Cognito, IAM, and OAuth 2.0, ensuring compliance with insurance security standards and protecting sensitive customer and financial data.
- Implemented comprehensive logging, monitoring, and alerting solutions using Amazon CloudWatch, AWS X-Ray, and centralized log aggregation, proactively identifying performance bottlenecks and production issues.
- Optimized application performance and cost efficiency through AWS Auto Scaling, load balancing with ALB, and rightsizing EC2 instances, reducing infrastructure costs while maintaining SLA commitments.
- Developed batch and real-time data processing workflows using Python, AWS Lambda, and S3 event triggers, enabling automated document ingestion, validation, and policy lifecycle updates.
- Enforced infrastructure best practices by provisioning cloud resources using AWS CloudFormation and Terraform, maintaining consistent, repeatable, and auditable infrastructure deployments.
- Wrote unit, integration, and regression tests using PyTest, unittest, and Postman, improving code coverage and ensuring high reliability across mission-critical insurance applications.
- Collaborated closely with product owners, business analysts, and QA teams in an Agile/Scrum environment, translating insurance business requirements into scalable technical solutions with rapid iteration cycles.
- Applied secure coding standards and compliance requirements such as SOC 2 and PII data protection, implementing encryption at rest and in transit using AWS KMS and TLS protocols.
- Refactored legacy Python applications into modular microservices architectures, improving maintainability, deployment speed, and alignment with modern AWS cloud-native design principles.
- Mentored junior developers, conducted code reviews, and established best practices for Python, AWS, and microservices development, contributing to higher team productivity and long-term platform stability.

Autozone | Python Developer

Mar 2015 - Aug 2019

- Designed and developed scalable insurance applications using Python, Flask, and RESTful APIs, supporting policy issuance, underwriting workflows, and claims processing while improving system reliability and response times.
- Built and optimized backend services leveraging AWS EC2, AWS Lambda, and API Gateway, enabling event-driven architectures and reducing infrastructure costs through serverless adoption.
- Implemented data ingestion and transformation pipelines using Python, AWS S3, and AWS Glue, processing large volumes of policy and claims data for downstream analytics and reporting.
- Built AI-powered banking assistants using LLMs, RAG, and Azure OpenAI to provide intelligent customer support and document search.
- Developed secure microservices with Flask, JWT authentication, and OAuth 2.0, ensuring compliant data exchange across internal insurance platforms and third-party vendor systems.
- Designed and maintained relational and NoSQL databases using Amazon RDS (PostgreSQL/MySQL) and DynamoDB, improving query performance and ensuring high availability for transactional systems.
- Automated deployment and environment provisioning using AWS CloudFormation, CI/CD pipelines, and Git, enabling faster releases and consistent infrastructure across development and production.
- Integrated messaging and asynchronous processing using AWS SQS and SNS, improving system resilience and decoupling policy and claims processing workflows.
- Performed extensive data analysis and validation using Python (Pandas, NumPy) and SQL, supporting actuarial teams with accurate insights on risk modeling and premium calculations.
- Implemented logging, monitoring, and alerting solutions using AWS CloudWatch and ELK Stack, proactively identifying production issues and improving application observability.
- Enhanced application performance through Python code optimization, caching strategies, and efficient database indexing, reducing API latency and improving end-user experience.
- Collaborated with business analysts and QA teams in an Agile/Scrum environment, translating insurance business requirements into scalable technical solutions and testable user stories.
- Developed automated unit and integration tests using PyTest and unittest, increasing test coverage and ensuring reliable deployments across multiple AWS environments.
- Secured sensitive insurance data by implementing AWS IAM, encryption at rest and in transit, and role-based access controls to meet compliance and regulatory standards.
- Supported data migration and modernization initiatives by refactoring legacy components into cloud-native AWS architectures, improving scalability and long-term maintainability.
- Worked closely with DevOps teams to containerize services using Docker, enabling consistent application behavior across development, testing, and production environments.
- Provided production support and root-cause analysis for critical incidents, leveraging AWS monitoring tools, Python debugging, and structured troubleshooting to ensure high system availability.

Delta Air Lines | Python Developer

Dec 2013 - Feb 2015

- Developed and maintained enterprise-grade applications using Python, Django, and Flask, delivering scalable backend solutions for airline operations, scheduling, and customer data processing while ensuring high availability and performance across systems.
- Designed and optimized complex data processing workflows using Python, SQL, and PL/SQL, enabling efficient handling of large volumes of flight, reservation, and operational datasets with improved query performance and reduced processing time.
- Built and integrated RESTful services using REST APIs, JSON, and XML, enabling seamless communication between internal airline systems, third-party vendors, and web-based front-end applications.
- Implemented business logic and automation scripts using Python scripting and Shell scripting, reducing manual operational effort and improving turnaround time for critical airline reporting and monitoring tasks.
- Collaborated closely with business analysts and stakeholders using Agile/Scrum methodologies to gather requirements, translate functional needs into technical designs, and deliver features aligned with airline operational goals.
- Developed reusable modules and libraries using Object-Oriented Programming (OOP) principles in Python, improving code maintainability, readability, and reducing duplication across multiple airline applications.

- Worked extensively with relational databases such as Oracle and MySQL, writing optimized queries, stored procedures, and data models to support real-time and batch processing requirements.
- Implemented data validation, transformation, and error-handling mechanisms using Python, ensuring data accuracy and consistency across flight operations, crew management, and reservation systems.
- Participated in application deployment and environment setup using Linux, Unix, and Bash scripting, supporting smooth releases across development, test, and production environments.
- Integrated messaging and batch processing workflows using Cron jobs and Python schedulers, enabling timely execution of operational reports and system maintenance jobs.
- Performed unit testing and debugging using unittest, PyTest, and logging frameworks, ensuring high-quality code delivery and reduced production defects.
- Worked with version control systems such as Git and SVN, following best practices for branching, merging, and release management within enterprise development teams.
- Supported production systems by analyzing logs, troubleshooting issues, and implementing performance improvements using Python profiling and database tuning techniques.
- Assisted in migrating legacy scripts and applications to modern Python-based architectures, improving system reliability, scalability, and long-term maintainability.
- Coordinated with QA, DevOps, and operations teams to ensure smooth application rollouts, timely defect resolution, and adherence to enterprise security and compliance standards.

CERTIFICATIONS & ACHIEVEMENTS

- AWS Certified Developer Associate - AWS
- Microsoft Certified: Azure Developer Associate - Microsoft