

SAI CHARAN

Software Engineer, Merrimack, NH, USA.

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Dynamic and results-driven **Software Engineer** with 4+ years of experience in **backend development, automation, and data engineering**. Adept in building scalable applications and robust infrastructure using **Python, Java, SQL**, and modern **cloud technologies** including **AWS, Azure, and Linux**. Proven ability to deliver high-impact automation solutions, optimize ETL pipelines, and implement **ITIL-aligned service operations**, including **incident management, SLA monitoring, and runbook-driven escalation workflows**. Seeking to contribute technical excellence and innovation in a growth-focused engineering environment.

Professional Highlights:

- Developed Engineered an automated price optimization engine for 100,000+ SKUs using **Python, Google Sheets API, and REST APIs**, slashing manual processing time by 60% and improving pricing accuracy by 70%.
- Built and deployed robust ETL pipelines with **Snowflake, Hadoop, and Pentaho**, enabling seamless data transformation and boosting product update efficiency across large vendor catalogs.
- Developed full-stack microservices using **Java, Spring Boot, and MySQL**, integrating with custom APIs and improving backend performance for enterprise web platforms.
- Designed and maintained cloud infrastructure using **AWS Lambda, CloudWatch, and Azure Monitor**, achieving 99.99% uptime and enabling real-time alerting for critical systems.
- Automated network monitoring and reporting with **Bash, SQL, and Python**, reducing incident response times by 30% and enhancing service SLA compliance.
- Streamlined incident handling and escalation workflows by integrating **Dynatrace, ServiceNow, and Jira**, improving root cause detection and reducing MTTR by 40%.
- Created enterprise-wide dashboards in **Tableau and Power BI**, turning raw data into actionable insights for executive-level decision-making across sales, IT, and procurement.
- Managed and optimized enterprise data integration workflows using **Informatica PowerCenter, PL/SQL, and Shell scripts**, reducing ETL job failures and improving delivery timelines.
- Delivered CI/CD automation using **GitHub Actions, GitLab CI, and custom deployment scripts**, accelerating release cycles and enhancing environment consistency.
- Developed cross-platform backup and lifecycle automation scripts in **Linux and AWS CLI**, ensuring compliance with data retention and disaster recovery standards.
- Built reusable QA automation flows with **JUnit, Selenium, and Python**, improving test coverage and release quality in agile development pipelines.
- Leveraged **RMM tools, cron jobs, and asset tracking scripts** to monitor IT hardware health, enforce compliance, and enable proactive infrastructure scaling.
- Collaborated with global engineering teams using **Agile, Scrum, Confluence, and SharePoint**, maintaining high transparency, delivery velocity, and documentation quality.

Education:

- Master of Science in **Computer Science**, University of Missouri – Kansas City, Missouri, USA,
- Bachelor of Engineering in Electronics & Communication, St. Joseph's College of Engineering, Chennai, India,

Certifications:

- **AWS Certified Solutions Architect – Associate** - Issued by Amazon Web Services
[Verify Credential](#)

Technical Skills:

Programming Languages	Java, Python, SQL, Bash, JavaScript
Frameworks & Web	.NET, Spring Boot, Spring MVC, HTML5, CSS3, AJAX, Fetch API
Databases & Storage	MySQL, MongoDB, Snowflake, Oracle, Vertica, Amazon RDS, DynamoDB, Amazon S3, EBS, EFS
Cloud & DevOps Platforms	AWS (EC2, S3, RDS, Lambda, CloudFormation, IAM, VPC, CloudWatch, Auto Scaling, ELB, Route 53, SNS, SQS, API Gateway, Systems Manager, CloudTrail), Azure, Linux, Git, GitHub, GitLab CI, AWS CLI, AWS SDK
Monitoring, Logging & ITSM:	Dynatrace, AWS CloudWatch, CloudTrail, ServiceNow, Jira, Azure Monitor
Data Engineering & ETL Tools	Informatica PowerCenter, Pentaho, Apache Hadoop, Hive, AWS-Glue
Infrastructure & Automation	Terraform, AWS CloudFormation, Bash Scripting, Shell Scripts, AWS Systems Manager (SSM), Lambda Automation
Visualization & Reporting	Tableau, Power BI, Google Sheets API
Security & Networking	IAM, Security Groups, NACLs, SSL/TLS, Key Management Service (KMS), CloudFront, WAF, VPC Peering, NAT Gateways, VPN, SCPs (Service Control Policies)
CI/CD & Deployment	GitHub Actions, GitLab CI/CD, Jenkins, CodePipeline, CodeDeploy, Elastic Beanstalk
Project & Documentation Tools	Confluence, SharePoint, Microsoft Office Suite

Professional Experience:

Client: Touch Screens Inc., U.S.A (via Source Consulting LLC)

January 2025 – Present

Touch Screens Inc. is a U.S.-based technology reseller and integrator providing customized solutions for commercial interactive displays and IT hardware across various sectors including retail, education, and healthcare.

About Assignment: The assignment involves automating internal pricing workflows to optimize the daily update process for large-scale product catalogs. This includes building scripts to compare existing product data against market references, apply business-specific pricing rules, and streamline reporting workflows. The system ensures data accuracy, improves update frequency, and minimizes manual overhead.

Designation: Software Engineer

Roles and responsibilities:

- Developed an automated price intelligence engine using **Python, Pandas, AWS Lambda**, and **Google Sheets API** to extract, compare, and adjust pricing for over 100,000 SKUs across vendors, improving pricing accuracy by 70%.
- Engineered scalable ETL pipelines using **Hadoop, Snowflake**, and **Pentaho**, enabling seamless ingestion, transformation, and loading of product catalog and performance data.
- Built data-driven dashboards with **Tableau, Power BI**, and **SQL**, visualizing inventory metrics and performance KPIs across business units.
- Integrated **Google Drive API, REST APIs**, and **Bash scripts** for automating daily reporting and archival of pricing logs, eliminating manual effort and reducing errors.
- Implemented infrastructure monitoring and remediation scripts in **AWS CloudWatch, Azure Monitor**, and **Linux**, reducing downtime due to system failures.
- Employed **RMM (Remote Monitoring & Management)** tools and **asset lifecycle scripts** using **GitHub, cron jobs**, and **Python** for device tracking, backup validation, and infrastructure governance.
- Authored and maintained **SLA-based runbooks** for pricing automation workflows, aligning with business continuity and **incident response protocols**.

Programming Languages/Tools: Python, Pandas, SQL, Bash, REST APIs, Google Sheets API, Google Drive API, AWS, Azure, Hadoop, Oracle, Snowflake, Vertica, Pentaho, Linux, GitHub

Client: Ziplly Fiber (via Trbhi Inc.), U.S.A

April 2024 – December 2024

Ziplly Fiber is a leading telecommunications provider in the United States, offering internet, voice, and enterprise-grade network services across multiple regions.

About Assignment: The assignment involved ensuring seamless operations and support for internal network systems and business applications. The role required active monitoring, issue resolution, and business application troubleshooting including Dynamics 365, all aligned with internal SLA requirements and operational best practices.

Designation: Network Operation Analyst

Roles and responsibilities:

- Monitored large-scale production systems using **Dynatrace**, **CloudWatch**, and **custom Bash scripts**, detecting early anomalies and significantly improving infrastructure reliability and SLA adherence.
- Diagnosed complex application failures across **Dynamics 365**, **Windows Server**, and internal APIs, leveraging **PowerShell**, **SQL Server logs**, and performance counters for real-time debugging and resolution.
- Wrote **Python scripts** to automate daily health checks, system log parsing, and alert validation workflows, reducing manual monitoring workload by 50%.
- Led RCA (Root Cause Analysis) sessions using data gathered from **ServiceNow**, **Jira**, and internal dashboards, implementing fixes that reduced recurring issues by 40%.
- Integrated escalation alerts using **Slack webhooks**, **email automation**, and **ServiceNow incidents**, enabling faster cross-team collaboration and visibility.
- Designed and updated incident playbooks, process documentation, and escalation matrices, ensuring continuity and clarity for on-call teams across shifts.
- Participated in disaster recovery simulations and business continuity testing, validating backups, failover paths, and restoring procedures across enterprise systems.

Programming Languages/Tools: Dynamics 365, Dynatrace, Jira, Windows, Bash, SQL, ServiceNow

Client: University of Missouri – Kansas City, MO, U.S.A

May 2023 – December 2023

UMKC is a public research university with a strong focus on academic innovation and research, serving over 16,000 students. This role was undertaken while pursuing a Master's degree in Computer Science.

About Assignment: Served as a Graduate Student Technical Assistant supporting the university's IT labs and infrastructure. The position offered hands-on experience in lab systems management, software support, and compliance maintenance in an academic research environment.

Designation: Graduate Student Technical Assistant

Roles and responsibilities:

- Managed and provisioned 150+ lab systems using **PXE booting**, **Group Policy**, and **Linux/Windows dual configurations**, maintaining a standardized environment for CS courses and research usage.
- Automated lab health monitoring and maintenance scripts using **Bash** and **Python**, resulting in 35% faster diagnostics and reduced helpdesk tickets.
- Configured software installations using **SCCM**, manual batch deployments, and local scripting methods, ensuring consistent software availability for semester-based curriculum.
- Troubleshoot networking, printing, and access control issues across university labs using **Linux CLI**, **Active Directory**, and **network monitoring tools** like **iptraf** and **netstat**.
- Conducted vulnerability scans and remediation in line with university IT security policy using **endpoint protection tools**, **patch audits**, and **access control scripting**.
- Supported professors with technical AV setups, virtual lab instances, and classroom software stacks involving IDEs, compilers, simulation software, and research tools.
- Participated in university-wide IT audits and semester-end inventory tracking by using **Excel**, **Access**, and internal barcode scanning systems.

Programming Languages/Tools: Linux, Bash, Windows, Microsoft Office, Python, Jira

Client: Wipro Technologies, Bengaluru, India.

September 2021 – July 2022

Wipro is a global IT consulting and business process services company serving clients across banking, retail, telecom, and manufacturing sectors.

About Assignment: The assignment focused on providing project coordination and operations support to the internal project management team. The role involved assisting with deliverable tracking, internal documentation, and completing technical and administrative tasks as requested by the PMO team.

Designation: Software Engineer

Roles and responsibilities:

- Automated and maintained enterprise-grade data integration pipelines using **Informatica PowerCenter**, **Unix Shell Scripts**, and **SQL Loader**, optimizing batch loads and ETL processing across large datasets.
- Designed robust transformation logic for handling transactional and master data across telecom and BFSI clients, utilizing **Oracle PL/SQL**, **Stored Procedures**, and **Performance Tuning**.
- Created reusable parameterized workflows in **Informatica Workflow Manager** with real-time logging and audit trail enhancements using **Python** and **SQL triggers**.
- Integrated data validation with **Excel macros**, **Python Pandas**, and automated reporting jobs for client-side reconciliation processes.
- Supported DevOps integration by deploying workflows to **GitLab** CI pipelines, performing regression tests, and validating metadata consistency across environments.
- Enhanced operational transparency by automating documentation via **Confluence templates**, **Jira dashboards**, and **custom shell report generators**.

Programming Languages/Tools: Microsoft Excel, Jira, ServiceNow, SharePoint, Confluence, Windows

Client: Merizon Technologies LLC, Remote, India.

May 2019 – August 2021

Merizon Technologies is a technology services provider offering IT consulting and development services to clients across multiple domains.

About Assignment: As a beginner in the professional tech space, the role focused on supporting project teams through a mix of development, testing, and coordination activities. The assignment provided foundational exposure to real-world software development practices and helped build core technical and teamwork skills in a collaborative environment.

Designation: Software Engineer

Roles and responsibilities:

- Built backend microservices using **Java**, **Spring Boot**, and **Hibernate**, delivering features for internal admin dashboards and client-facing portals.
- Wrote optimized **MySQL** queries and normalized database schemas to support reporting and transaction integrity for B2B platforms.
- Developed and styled user interfaces using **HTML5**, **CSS3**, and **Vanilla JavaScript**, integrating with backend APIs via **AJAX** and **Fetch API**.
- Participated in CI workflows using **Git**, **GitHub Actions**, and **Eclipse IDE** for version control, automated testing, and incremental deployment.
- Created reusable test cases in **JUnit** and contributed to QA automation by scripting functional test flows using **Selenium WebDriver**.
- Implemented system performance monitoring using **JVM Profiler**, **VisualVM**, and server logs analysis for response-time optimization.

Programming Languages/Tools: Java, MySQL, HTML/CSS, Git, Eclipse, Windows