# Teja Govindula - Application Developer

# tejagovindula@gmail.com, (330)945-0629.

# Master’s in computers and Information Sciences, Kent State University with 3.78 GPA.

**Professional Summary:**

Highly skilled and adaptable Application developer with 7+ years of experience and strong foundation in Software development. Possesses comprehensive knowledge and hands-on experience in a wide range of Technologies, AWS services, big data technologies, programming languages, frameworks, databases, and other essential Development tools.

Demonstrates expertise in designing and implementing scalable Applications, data solutions, data pipelines, and ensuring data quality and integrity. Adept at leveraging cloud-based technologies and distributed systems to handle large volumes of data efficiently. Equipped with a strong understanding of software development principles and best practices, as well as experience in testing, version control, and web server administration. Excels in collaborative environments, with excellent problem-solving abilities and a drive for continuous learning and improvement.

Furthermore, I possess in-depth knowledge in Manufacturing Industry not limited to calculating Overall Equipment Effectiveness (OEE), analyzing yield/quality rates, and evaluating performance indicators within factories. I have leveraged data-driven approaches to optimize OEE, identify bottlenecks, and implement strategies for yield improvement. Through the utilization of data analytics and visualization tools, I have enabled organizations to make informed decisions, reduce downtime, and maximize productivity.

**Technical Skills:**

**AWS Services:** IAM, S3, Lambda, Boto3, API Gateway, DynamoDB, CloudFormation, SQS, SNS, Step Functions, Kinesis, EMR, ECS, CodePipeline, Glue Catalog, Redshift, CodeCommit, KMS, CloudWatch.

**Programming Languages:** Python, JavaScript, C#, Java, VB.NET, PL/SQL, T-SQL, XML, JSON

**Frameworks/Technologies:** Ignition (Inductive Automation), Flask, Django, UnitTest, TestNG, JUnit, NUnit, Log4j, AJAX, Web API, XHTML, HTML5, CSS3, DHTML, XSLT, JavaScript, jQuery, JSON, NumPy,Pandas

**Databases:** SQL Server, Elasticsearch, Kibana, T-SQL, DB2, DBMS, MySQL, NoSQL, MongoDB, Cassandra, Snowflake

**Scheduling Tools:** Airflow (DAG’s), Oozie, MS Task Scheduler

**SOA:** WSDL, SOAP, REST, JSON, XML, XHTML

**IDE:** PyCharm, Eclipse, IntelliJ IDEA, Ignition

**Testing Tools:** Selenium WebDriver, QTP/UFT, SOAP UI, Win Runner, Load Runner

**Version Controls:** GitHub, Team Foundation Server (TFS), SVN

**Other Tools:** SCADA, JIRA, Tableau, Jenkins, SSRS, MS Office

**Professional Experience:**

**Client: Flex Ltd., Buffalo grove IL.**

**Role: Application Developer July 2018 – Present**

**Responsibilities:**

* Developed and implemented full lifecycle development of web, stand-alone, and client-server enterprise applications using **Python/ Flask**, and the Rest Framework. Managed stages from analysis to implementation, ensuring a seamless application experience for users.
* Developed end-to-end web applications, integrating frontend technologies such as **HTML, XML, KML, Angular JS, CSS, DHTML, JavaScript, and jQuery** with a Python backend.
* Leveraging expertise in **SQL Server** to design and optimize stored procedures, complex SQL queries, index creation, and query optimization to drive improved performance and efficiency. Proficient in fine-tuning SQL code and leveraging indexing strategies to maximize system scalability and maintainability. Adept at analyzing and troubleshooting database issues, providing effective solutions to enhance overall performance. Experienced in performance tuning techniques such as query optimization, database partitioning, and indexing strategies to ensure optimal database operations and efficient data retrieval.
* Utilized **ELK (Elasticsearch, Logstash, Kibana)** stack for efficient indexing and querying of data. Implemented Elasticsearch indexes and queries to optimize search performance and accuracy. Developed real-time dashboards using Kibana for monitoring key performance indicators (KPIs).
* Utilized **Python libraries**, including the Elasticsearch modules, to interact with Elasticsearch and perform various operations. Developed Elasticsearch indexes and optimized search queries using DSL (Domain-Specific Language).
* Developed solutions and KPI’s/reports in **Ignition by Inductive Automation** and expert in Reading PLC Tags, Transaction Groups, Ignition Components and Worked with different types of PLC’s like siemens, Allen Bradley, Modbus directly connected to Machine to extract the data.
* Tested and validated software developments based on predefined plans, Executed the **Verification and Validation process**, ensuring the quality and functionality of developed software solutions in **medical environment**.
* Participated in **audits, ensuring compliance with regulations**, and tracking the history of devices and materials using Elasticsearch and SQL Server to maintain data integrity and audit trails.
* Designed and implemented highly scalable infrastructure using **AWS CloudFormation, IAM,** and various services such as **S3, Lambda, API Gateway**, **and DynamoDB**. Orchestrated the creation of resources and defined access controls using IAM policies to ensure secure and efficient cloud deployments.
* Leveraged **Boto3**, the AWS SDK for Python, to automate tasks, interact with AWS services, and streamline workflows. Developed custom scripts and applications for data processing, monitoring, and management.
* Designed and implemented **serverless architectures** using Lambda functions, API Gateway, and other serverless services. Built event-driven systems, enabling efficient and cost-effective execution of business logic.
* Implemented and maintained CI/CD pipelines using **CodePipeline, CodeCommit**, and other DevOps tools. Automated the build, test, and deployment processes, ensuring reliable and efficient software delivery.
* Designed and developed data processing pipelines using **AWS Glue Catalog**, transforming and enriching data for analytics and reporting. Integrated Glue with other services like Redshift and EMR to enable data orchestration and ETL workflows.
* Configured and utilized AWS messaging services such as **SQS and SNS** for reliable message queuing and pub/sub communication patterns. Built distributed and decoupled systems, ensuring reliable message processing and notification delivery.
* Implemented and orchestrated complex workflows using **AWS Step Functions**, enabling coordination and sequencing of microservices and serverless functions. Designed and managed state machines for business process automation and coordination.
* Configured and monitored system and application metrics using **AWS CloudWatch**. Developed custom monitoring solutions and alarms to proactively identify and address performance issues and anomalies.
* Implemented secure key management using **AWS Key Management Service (KMS)**. Managed encryption keys and integrated encryption into various AWS services and applications for data protection.

**Client*:* Anthem Inc., Chicago IL.**

**Role: Automation Engineer Dec 2017 – June 2018**

**Responsibilities:**

* **Utilized AWS services:** Amazon EC2, S3, and Lambda for test environment setup and execution.
* **Experience in deploying and managing applications:** Configuring AWS services for scalability, high availability, and fault tolerance. Utilized CloudFormation for provisioning and management. Implemented automated testing and deployment pipelines using CodePipeline and CodeDeploy. Leveraged CloudWatch for monitoring and logging. Familiarity with AWS security best practices and implementing security measures.
* **Acceptance Criteria and Test Cases**: Proficient in writing acceptance criteria, testing cases, test scenarios, and developing architecture diagrams based on business requirements.
* **Web Application Testing**: Experienced in conducting various types of testing on web applications, including feature, regression, smoke, performance, failover, and end-to-end testing.
* **Web Services and RESTful Endpoints**: Skilled in testing and analyzing web services and RESTful endpoints using tools like Swagger and Postman.
* **Java and TestNG**: Proficient in Java programming language and TestNG framework for test code development.
* **Automation Testing:** Designed and developed automation scripts using Selenium WebDriver, including UAT regression automation scripts and functional testing frameworks. Proficient in data-driven and XPath locator approaches.
* **HP Automated Tools:** Proficient in using HP Automated Tools such as UFT (QTP) 11.52 and Quick Test Pro 9.2.
* **Mobile Application Testing:** Developed automation scripts for mobile native applications using Appium and Java.
* **Backend Testing:** Executed SQL queries for backend testing, including database changes for Oracle 11g, 12g, RoboMongo 0.9.0, and Cassandra.

**Client*:* Johnson Controls, Chicago, IL.**

**Role: Automation Engineer**  **Dec 2016 – Nov 17**

**Responsibilities:**

* **Framework Development:** Used Page Object Model (POM), UI Mapping, Selenium Manager, and Data Driven approach with CSV. Developed Selenium test cases in Java using the TestNG framework.
* **Code Reusability:** Identified reusable functionality and implemented reusable methods for code reusability.
* **Selenium and WebDriver:** Extensively used Selenium for data-driven testing and XPath locator approach. Utilized WebDriver to test the web application.
* **Web Services Testing:** Utilized various test tools for automation of test cases and performed extensive web services testing using SOAP UI. Tested SOA-based architecture applications, including SOAP services and REST APIs.
* **Test Data Preparation:** Prepared test data and test responsibility matrices for the applications under test.
* **Version Control and Dependency Management:** Used Clear Case and Subversion for code repositories and Maven for managing dependencies.
* **Script Execution:** Executed Java and Python scripts to automate test cases.
* **Backend Testing:** Developed and executed SQL queries for backend testing, including database changes for Oracle 11g, 12g, and Cassandra.
* **Web Services Automation**: Developed and executed automation test scripts for web services using JMeter.
* **Change Management:** Created Server Request Tickets for new servers in Test and tracked Change Control Tickets for Production Deployments using JIRA.
* **Post Deployment QA:** Performed post-deployment QA processes, including updating test environments, reviewing regression tests, and providing cross-team training.
* **Test Environment Setup:** Set up new test environment servers and assisted in performing other QA activities like maintaining the QA lab and updating Confluence pages.

**Client: Applab Systems Inc., Edison NJ.**

**Role: Automation Engineer**  **Feb 2016 – Nov 2016**

**Responsibilities:**

* **Test Plan and Test Cases**: Prepared test plans, test cases, test scripts, and test steps for all modules.
* **Automation with Java and TestNG**: Used Java with TestNG framework for automating scripts.
* **Agile Collaboration**: Attended Sprint Backlog grooming sessions and participated in Sprint Demo before releasing to production.
* **Selenium WebDriver Automation:** Developed test scripts to automate testing processes using Selenium WebDriver.
* **Requirements Traceability:** Developed a Requirements Traceability Matrix to align test cases with requirements.
* **EDI Testing:** Analyzed EDI requirements and mapping documents. Prepared test cases for various EDI transactions.
* **Test Management Tools**: Created and executed manual test cases in ALM (Application Lifecycle Management), worked on automated test cases in UFT (Unified Functional Testing), and viewed and analyzed test results in ALM.
* **Data Driven Frameworks:** Implemented data-driven frameworks using Selenium WebDriver and TestNG to create parameterized test scripts and generate XSLT reports.
* **SQL Querying and Data Validation**: Executed test scripts and wrote SQL queries to validate data between source tables and data files generated from GUI Extract Package.
* **Testing Types and Tools**: Performed requirement-based testing, user acceptance testing (UAT), negative testing, GUI testing, system testing, integration testing, performance testing, stress testing, end-to-end testing, and back-end testing on multiple operating systems. Used tools such as JIRA, JMETER, LOADRUNNER, VSTS, and SoapUI.
* **ETL Testing**: Worked as an ETL Tester, responsible for requirements/ETL analysis, ETL testing, and designing flow and logic for data warehouse projects.
* **Keyword Driven Framework**: Designed, developed, and processed a Keyword Driven Framework for UFT (Unified Functional Testing) using VB Script.
* **Database Testing:** Developed and executed SQL queries for testing database integrity and data analysis.
* **Collaboration and Dependency Management**: Estimated test timelines for each test case, engaged with the development and project teams to inform QA dependencies and deliverables, and provided QA test activities dependencies and test timelines to the deployment team.
* **Release Validation Testing:** Performed release validation testing in the production environment.