

AKASH SINGH

Software Engineer

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Professional Summary

Software Engineer with a proven track record at Nokia and Knoldus Inc., specializing in Python automation, web application development, and MySQL. Skilled in automation testing and process optimization, consistently delivering high-quality, efficient solutions through collaboration and innovation.

Skills

Language: Python, PHP, JavaScript, PL/SQL, HTML, CSS

Frameworks & Libraries: Django, Flask, Pandas, Selenium

Databases: MySQL

Tool & Technologies: GitHub, GitLab, Linux, Postman, JSON, XML

Core Competencies: Process Automation, Scripting, Workflow Integration

Experience

Software Engineer at Nokia (via STCS)

Gurgaon, Haryana, India

02/2024 to Current

Working as Software Engineer, focusing on software development, task automation, and scripting. Primarily involved in developing web and desktop applications creating python automation scripts and integrating tools to enhance productivity and efficiency.

Key Contributions:

- Developed a *Lab Management Tool* for lab booking with real-time email alerts and an admin panel, which streamlined the booking process.
- Developed an *Inventory Management Tool* for real-time tracking and bulk Excel data handling, reducing the effort required for tracking and recall by 90%.
- Developed an E-Learning Video Website with separate admin and user panels, allowing admin to assign specific course packages to users from designated organizations, ensuring targeted access to training content.
- Developed a *Network Configuration Validation & Reporting Tool* using Python that parses Nokia router JSON files, performs 20+ compliance checks (ISIS, BFD, LLDP, RSVP), and generates Excel-based audit reports, automating network validation and reducing manual effort by 95%.
- Automated data workflows in *Salesforce* using Selenium, Python, and task scheduler.
- Enhanced network analysis with an *Interior Gateway Protocol (IGP) Topology Visualization Tool* that processes multi-vendor LSDB outputs.
- Delivered *Employee Management Tools* for efficient operations at KIA Networks.

Technologies Used: Python, Selenium, MySQL, PHP, HTML/CSS, JavaScript, openpyxl, pandas, JSON, REST APIs

Bharti Airtel - Network Audit Tool:

As part of a larger Network Configuration Validation System at Nokia:

- Developed a Django-based web portal that interfaces with a backend Python script performing 20+ compliance checks (e.g., ISIS, BFD, LLDP, RSVP) on Nokia router configuration JSON files.
- Designed database models in MySQL that are automatically populated when the validation script runs. Each run stores metadata and parsed validation results.
- The Django dashboard dynamically fetches and displays the stored records in sortable, searchable tables, allowing engineers to monitor compliance statuses and download Excel audit reports.
- Added modular views for different validations (e.g., interface checks, protocol status, mismatches) and *Flask microservices* to assist in real-time querying and JSON file previews.
- Significantly reduced manual validation and audit effort by 95% and ensured standardized configuration health checks across the network.

Technologies Used: Django, Flask, MySQL, Python, Pandas, Bootstrap, JavaScript, Postman

Gained expertise in manual and automated testing for websites and mobile applications, ensuring software quality through rigorous validation and continuous improvement.

Key Contributions:

Knoldus Go1Percent Website:

- Developed and executed automation scripts to rigorously test the company's website, uncovering and addressing critical issues.

Loblaws and Shoppers Drug Mart Website and Application:

- Developed automation scripts for production and QA website testing, ensuring platform reliability.
- Automated testing for Android and iOS apps across multiple brands, improving release efficiency.
- Integrated automated testing with CI/CD pipelines, reducing deployment issues.
- Conducted detailed analysis of project reports, contributing to code refactoring and performance enhancements.

Joe Fresh Website:

- Managed daily CI/CD pipeline execution, created automation scripts, and actively participated in resolving daily pipeline execution reports.

Education

Integrated B.C.A. + M.C.A: Computer Science and Engineering

06/2018 to 06/2023

Galgotias University - Greater Noida, India

- Final Grad: 82 %

Certifications & Accomplishments

- Hacktoberfest 2020: Completed and received swag in the open-source virtual festival by Digital Ocean.
- Oracle Academy: Certificate earned for proficiency in PL/SQL Database Programming Semester 2.
- AWS Cloud Practitioner Essentials: Completed with AWS training and certification.
- Python 101 for Data Science: Successfully completed with outstanding performance.