sshreyv@gmail.com **SHREY SHAH** 24 Trout Run

(647)-675-0790

Halifax, NS

**SUMMARY**

* AI Software Engineer with over 8 years of experience in software development and 1.5 + years of experience developing AI-driven tools and solutions.
* Extensive experience with AI tools such as **LangChain, LangGraph, litellm** with hands-on development of multi-agent applications,**RAG** and **knowledge graph**s systems at scale.
* Extensive experience withDocker, Kubernetes, and AWS
* Skilled in prompt engineering and fine-tuning llms, improving automation efficiency through AI-driven solutions.
* Experience creating **evaluation frameworks** for Generative ai applications
* Experience working with image generation models like stable diffusion and flux with comfyui.
* Expertise in testing LLM-powered **chatbots**, utilizing prompt injection techniques to ensure robust performance.
* Experience in quantizing models to optimize performance for local environments and ensuring context-aware AI implementations.
* Over 3 years of experience using AI tools like copilot and cursor ai to increase productivity.
* Designed and executed prompts for testing LLMs applying different prompt engineering methods and tools like promptmap

**TECHNICAL SKILLS:**

* **Programming Languages:** Java, **Python**, JavaScript, Typescript
* **Knowledge of Dev-ops tools**: Docker, GitHub Actions, Harness, Kubernetes
* **Database Systems:** SQL Server, MySQL, MongoDB
* **Life- cycle management:** Jira, confluence, Azure Dev-ops
* **IDES**: IntelliJ, PyCharm, Eclipse, Atom, VScode
* **Operating Systems:** Linux, OS X, UNIX, Windows
* **AI Tools: ComfyUI, Langchain, Langgraph, Langserve, Langsmith, W&B, HF Metaflow**
* **AI Model Optimization: Model quantization, Prompt engineering, promptmap, trulens, Autotrain, Axoltl,**

**WORK EXPERIENCE**

**AI Software Engineer Vivun May 2023 – Present**

Environment: Agile, Jira, Playwright, Axios, Mocha, Chai, Postman, GRPC, Node.js, TypeScript, Splunk, GraphQL

* Became an AI advocate within the team and organization. Led training sessions for Developers on integrating AI.
* Led the development of multi-agent applications using **LangChain** and **LangGraph** frameworks for efficient LLM and RAG-based systems.
* Collaborated with teams to develop proof-of-concept projects exploring RAG solutions, including **Hybrid RAG, GrpahRag** and **Agentic RAG**.
* Integrated knowledge graphs using **Neo4j**, improving data processing and retrieval.
* Demonstrated expertise in a broad spectrum of AI tools including **ChatGPT, co-pilot, and Cody**, RelicX applying advanced prompt engineering techniques to maximize tool effectiveness and productivity.
* Developed an instruction-tuned dataset for the purpose of fine-tuning test automation **LLMs**  in a local and secure manner.
* Conceptualized and executed multiple proof-of-concept projects exploring the application of various AI tools in our project.
* Developed local **AI tools** fine-tuned for the specific use cases for the applications for increasing productivity.
* **Fine-tuned and quantized** different **LLMS** to enhance model performance in local environments, reducing resource consumption.
* Tested our chatbot with different prompt injections and jail breaking techniques.

**Lead SDET Priceline June 2021 – May 2023**

Environment: Agile, Mocha, Chai, Postman, WebDriverIO, Axios, GRPC, Jira, Node.js, SQL, JavaScript, Splunk, GraphQL

* Led development of an end-to-end test automation framework using wdio, Appium, Mocha and Saucelabs for web, mobile and API testing, significantly improving test coverage and reducing regression testing time. This allowed new features to be released faster, resulting in increased customer conversion rate.
* Implemented GitHub actions for automating the entire release process, including PR creation and merging, as well as confluence release documentation, reducing release time.
* Developed backend for one of core products using Spring Boot, supporting high volume of daily transactions and driving strong revenue growth after launch.
* Created algorithms to auto-generate tests from historical test-data, reducing manual test creation and maintenance efforts. This allowed the testing team to keep pace with aggressive development timelines, while improving test coverage and quality.
* Integrated test automation framework with Zephyr Scale to provide end-to-end traceability. This improved visibility into overall test coverage and helped identify areas needing more test focus, reducing defects.
* Implemented Splunk dashboards and alerts for real-time application performance monitoring. This enabled pre-emptive identification and resolution of issues, improving uptime and customer satisfaction.
* Provided technical leadership and mentoring on test automation best practices using Mocha, WebDriverIO and JavaScript, improving team productivity and efficiency.
* Played a pivotal role in the recruitment process for SDETs conducting interviews to match job requirements.

**Automation Developer Powerhub Inc. sept 2020 – June 2021**

Environment: Agile, Mocha, Chai, Postman, Puppeteer, TFS, Azure Dev-ops, Node.js, JIRA, MongoDB, JavaScript

* Conducted thorough research on potential technical and non-technical solutions, testing frameworks, and emerging tools,

enhancing business operations efficiency.

* Developed an innovative test automation framework using Cypress, Mocha, Chai, and JavaScript from scratch, improving

test automation efficiency.

* Implemented Eslint and SonarQube tools to consistently maintain code quality, decreasing bugs and errors.
* Employed Postman, Mocha, Chai, JavaScript for API testing, and JMeter for UI/API performance testing,
* Crafted MongoDB queries in Roto3T for database validation against the UI, enhancing data accuracy.
* Leveraged Azure DevOps and Visual Studio Team Foundation for agile ALM, fostering efficient communication and

collaboration between development and QA teams.

**QA automation developer Parsedata Apr 2020-sept 2020**

**Environment:** Agile, Azure, Linux, Microsoft Teams, Azure AD, Bash scripting, Selenium, python, Java, GitHub, SoapUI

* Gained hands-on experience with Microsoft Azure DevOps portal and Active Directory.
* Developed a robust testing framework using Python, Selenium, Pytest, and POM for web applications, reducing bug reports

and saving time.

* Spearheaded the creation of user stories, acceptance criteria, API specification documents, and guides, improving

deliverables and project outcomes.

**Quality Assurance Automation Engineer NXM Labs INC Feb 2018-Apr 2020**

**Environment:** Agile, TDD, Selenium WebDriver, python, JAVA TestNG, JIRA, IoT, POM Design Pattern, GitLab, SoapUI, JMeter, ADB, **Appium, Gherkin**

* Led comprehensive testing of applications, including Blockchain, Mobile & Web apps, SQL databases, and IoT devices, ensuring product quality and enhancing user experience.
* Developed a data-driven framework for API, Web, and Mobile app testing, improving testing accuracy and speed.
* Engineered an API testing framework using Python and Pytest for IoT devices, increasing testing efficiency.
* Conducted load testing on APIs using Apache JMeter and Artillery, optimizing application performance and reliability.
* Performed code quality analysis using Sonarlint and SonarQube, reducing errors in the QA framework.

**Software Tester Webyoutechnologies May 2014 -Apr 2016**

* Developed Selenium test cases using the **Hybrid framework** (Data Driven Framework with POM and TestNG)
* Validated the scripts to make sure they have been executed correctly and meet the scenario description.  .
* Developed Test scenarios, Test Cases & Test data and Performed **Positive and Negative testing**

**EDUCATION**

**Master of Engineering University of Windsor May 2016- Aug 2017**

**Bachelor of Engineering Gujarat Technological University Aug 2011-May 2015**