**Programming —** Python, Java, JavaScript (ES2023)

**Scripting —** Bash, PowerShell, Python

**Test Frameworks —** Playwright, Cypress, Pytest, JUnit, TestNG, Jest, Cucumber

**Test Automation —** End-to-end, API, contract, integration, mobile, regression, performance, security, system, self-healing, and agentic testing

**AI/LLM & Agentic Tools —** OpenAI (GPT-4, GPT-4o), LangChain, LlamaIndex, DeepSeek, Hugging Face, Ollama, Cohere, Anthropic Claude, Mistral  
➕ Vector stores: FAISS, Chroma, Weaviate  
➕ RAG (Retrieval-Augmented Generation), prompt engineering, function calling, memory-augmented agents, tool use

**Agent Orchestration Frameworks —** LangGraph, crewAI, AutoGen, Superagent, Meta Llama Agents

**Testing Tools —** Postman, JMeter, Allure Reports, Playwright Trace Viewer, REST Assured, TestRail, Chrome DevTools, JSON Schema Validator

**Mobile Testing —** Appium, BrowserStack, Android Studio, XCUITest

**DevOps / CI/CD —** GitHub Actions, GitLab CI/CD, Jenkins, Docker, Kubernetes, Terraform, Helm, Maven, Gradle

**Databases —** PostgreSQL, MySQL, MongoDB, SQLite

**Web & API Technologies —** REST, GraphQL, JSON Schema, YAML, XML, HTML5, CSS, ECMAScript

**Debugging —** Playwright Inspector, Postman Console, DevTools, IntelliJ IDEA, VS Code

**Developer & Agile Tools —** Git, GitHub, GitLab, VS Code, IntelliJ, JIRA, Confluence, Slack, Notion, Jupyter Notebooks

**Operating Systems —** Windows, Ubuntu, macOS, iOS, Android

**UI Frameworks —** React, Next.js, Redux Toolkit, Tailwind CSS, Bootstrap, Node.js, Spring Boot, .NET Core

**Web Services & Microservices —** Apache Tomcat, Apache HTTP, NGINX, Microsoft IIS, Express.js, REST APIs

**Monitoring & Observability —** Grafana, Kibana, AWS XRAY, Prometheus, OpenTelemetry, Splunk

**Methodologies —** Agile (Scrum, Kanban), TDD, BDD, EBM, DevSecOps, Shift-Left Testing