AVRAAJ MATHARU

DEVOPS ENGINEER / SOFTWARE AUTOMATION ARCHITECT/ TECH INNOVATION / DATA SCIENCE ML AI

CONTACT

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EXPERTISE & SKILLS

- Renowned as a Technical Virtuoso, I navigate the SDLC and STLC with precision.
- <u>DevOps Engineering</u> Linux(ARM & X86 architecture), Shell / Bash Scripting, Creating and Maintaining VMs & Servers, Vagrant, Rosetta, Developing and maintaining CI /CD pipelines, Containerization - Docker images & containers, Kubernetes, Terraform, YAML file configurations, GitOps, Azure DevOps, AWS CodeBuild, AWS CodePipeline, Jenkins, Ansible.
- <u>Software Development</u> HTML, CSS, JavaScript, Node.js, ReactJS, JSX, jQuery, APIs, and Bootstrap.
- Cloud platforms AWS & MS Azure
- Operating Systems Windows, MacOS, Linux, Ubuntu, Fedora, CentOS.
- <u>Automation Architect</u> Java, Selenium, Appium, BDD, Cucumber, Gherkin, Page Object Model, Robot, Tosca, POSTMAN, ReadyAPI, MOCHA, Jest, CHAI, WebdriverIO, ELK / OLK Stack, Building CI /CD pipelines, JIRA, Keyword driven / Data driven/ Hybrid frameworks and more across Agile and Waterfall SDLC methodologies.
- <u>Data Science, ML and AI algorithms</u> AI/ML
 Alchemist providing guidance from fundamentals
 to advanced topics, excelling in evaluating
 predictive performance and navigating the
 landscape of deep learning. Python, Scikit-learn,
 Tensorflow, Numpy, Pandas, Matplotlib, Seaborn,
 Decision Trees, KNNs, Logistic Regression, SVM,
 Neural Networks, CNN, Deep Learning,
 HyperParameters, Reinforcement Learning.

REFERENCES

Darren Coupland (EVP, Head of Sogeti UK)

darren.coupland@uk.sogeti.com

Gary Moore (Vice President, Sogeti UK)

gary.moore@uk.sogeti.com

Declan Griffin (Sales Director, Capgemini /Sogeti UK)

declan.griffin@sogeti.com

MEMBERSHIP & REPRESENTATIONS

- Lead Technologist at Sogeti UK
- UK Guild Lead for Innovation, AI & New technologies
- · UK Representative for Global Architects,
- UK Representative for AI/ML
- Member of SogetiLabs UK

WORK EXPERIENCE

Automation Architect / DevOps Engineer / Developer

Capgemini UK Plc (Sogeti)

2019-Current

UKHSA - Public Health Sector

2020-Current

- Finalist, European Software Testing Awards 2022.
- Led multiple teams across various sub-projects, developing a robust automation framework for the COVID-19 Test & Trace app across Android, iOS, and web platforms using Java, Appium, RestAssured, Selenium, BDD, Cucumber, and Gherkin for development.
- Established and managed a streamlined CI/CD pipeline using AWS CodeBuild, CodePipeline, and GitHub Actions, ensuring seamless integration and deployment.
- Integrated Docker containerization into the workflow using YAML and Terraform configurations, optimizing resource management.
- Managed VPCs, created and managed VMs (EC2 instances), S3, CloudWatch, ECR, ECS, EKS proficiently for efficient application deployment and data storage.
- Generated comprehensive Test and Automation reports weekly, harnessing ML insights via ELK (OLK) dashboard for continuous improvement.
- Applied a holistic approach, combining DevOps and Technical Architect expertise to drive innovation and efficiency in software development and deployment processes.
- Provided technical expertise in security and infrastructure assessments, evaluating vendor tools based on Enterprise Architecture Principles for optimal solutions.
- Crafted meticulous Automation Test Strategies and plans, conducting thorough feasibility analyses to ensure efficacy.

GEN AL AMPLIFIER

Capgemini UK Plc (Sogeti)

Current

- Contributed to GenAl Amplifier (In house GenAl tool) development, enhancing functionality and usability.
- Implemented SonarQube and GitHub security scans in Azure DevOps pipeline via Docker Containers and GitHub Actions.
- Created and managed AVMs, Azure Blob storage, ACI, AKS.
- Led front-end features development for GenAl Amplifier: code generation, refactorization, and test case generation.
- Applied coding best practices and React Router DOM for optimized page load performance.
- Actively engaged in brainstorming, code reviews, and team meetings to improve tool functionality.
- Collaborated with cross-functional teams to ensure smooth task execution and alignment with project goals.

Software Test Automation Architect

Capgemini UK Plc (Sogeti)

Spirit Energy & Welsh Water - Utility sector

2020

- Architected Test Automation framework with Tricentis TOSCA for SAP SuccessFactors.
- Setup automation environment with VMs, VDIs, and TOSCA Server for overnight tests.
- Evaluated automation tools, driving coding standards for scripts.
- Produced daily/weekly automation reports for tech and management.
- · Established as key technical contact, managed stakeholders effectively.

SAP Software Development Engineer in Test

Capgemini UK Plc (Sogeti)

British Aerospace and Defence Systems - Defence

2019-2020

- Designed Test Automation framework and scripts for SAP migration from SAP r/3 to SAP S/4 HANA.
- Orchestrated CI pipeline using TOSCA Server / Jenkins to align with DevOps principles.
- Engineered and executed Automation Test Strategy and Plan.
- Evaluated and implemented Automation test tools for a greenfield project.
- Demonstrated technical prowess by integrating client's PLM, Workflow Management tool with Tricentis TOSCA through PoC presentations.
- Conducted comprehensive analysis of environments, infrastructure, and UI functionality to devise Test Automation implementation plan.
- Presented client demonstrations highlighting the advantages of transitioning from manual to automated testing.
- Implemented Tricentis TOSCA for developing and scheduling automated test runs.

Software Automation Architect / Delivery Lead

Capgemini UK Plc (Contractor)

Ministry of Defence UK 2018-2019

- Developed and maintained robust automation frameworks:
- Framework 1: Java, Selenium WebDriver, BDD (Cucumber, Gherkin), Page Object Model.
- Framework 2: JavaScript, MOCHA test framework, Grunt, WebDriverIO, CHAI assertion library for MoD projects.
- Maintained and executed automation scripts using F# on Canopy Test framework.
- · Introduced Agile methodologies (SCRUM, KANBAN) to enhance testing efficiency and delivery speed.
- Managed Test environments on Linux OS, including deployment, snapshot management, and environment upkeep using Shell scripting.
- · Configured and executed overnight tests using Jenkins and TeamCity for Continuous Integration and Continuous Deployment.
- Utilized Micro Focus ALM and UFT for automation script maintenance and execution.
- Contributed to Test strategy creation, planning, automation framework development, script execution, and report generation.
- Scheduled and automated tests using Micro Focus ALM and UFT 14.0.
- Managed Statement of Work activities and led teams, achieving 100% revenue realization.
- · Facilitated active engagement with stakeholders for commercial sign-off and proficiently managed billing processes.

Software Development Engineer in Test

Capgemini UK Plc 2016-2018

Royal Mail UK Plc 2017-2018

- · Enhanced existing automation framework with Java and Selenium for improved productivity and efficiency.
- Implemented REST API Automated Testing with SoapUI, enhancing testing capabilities.
- Utilized Groovy scripting language to integrate tests and manage test data effectively.
- Created mocks/stubs for web service responses using Java and Groovy scripting.
- Led Sprint Planning and Retrospective meetings, driving Agile methodologies adoption.
- Facilitated Automation Tool selection for web and API testing, ensuring optimal solutions.
- Developed integration between JMeter and Jenkins for one-click API Automation test execution, aligning with DevOps architecture.

Software Development Engineer in Test

Capgemini UK Plc

Talk Talk - Telecommunications 2016-2017

- Pioneered Agile-driven Test Automation integration.
- · Architected Selenium Automation framework leveraging Java, TestNG, and Page Object Model.
- Enhanced Test cycle time, coverage, and release quality.
- · Conducted workshops on Selenium, Java, and TestNG for QA community empowerment.
- · Engineered Java-based utilities for automated Test Data creation.
- Developed and managed web-based automation portal for seamless Bugzilla-JIRA integration.
- · Contributed to tool selection for Java-based windows desktop applications.
- · Led Automation Testing across two concurrent projects, balancing execution and project management duties.

Software Development Engineer in Test

DHL Ltd. (Formerly UK Mail) 2014-2016

- Developed automated test scripts for online, mobile, and web-services testing across STLC and SDLC.
- · Extracted, designed, and developed test cases for both client-server and web applications from requirements specifications.
- Automated web-services testing in SOA environment using SoapUI.
- Conducted load testing and stress testing using JMeter and SoapUI.
- Implemented automation testing in Test Driven Development (TDD) environment.
- · Executed alpha and beta testing for UAT, functional testing, GUI testing, regression testing, and system testing.
- Generated mock responses (service virtualization) using Service V, Service VPro, and SoapUI.
- Utilized Groovy scripts to manipulate test data, trigger test suites, etc.
- · Conducted cross-browser testing (browser compatibility).
- Managed test repository in Team Foundation Server (TFS) and Microsoft Test Management (MTM).
- Utilized defect raising and tracking tools like Jira, SharePoint, TFS, and MTM.
- · Generated periodic test reports and provided timely updates to Test Manager, Project Manager, and Business Manager.
- · Worked with RDBMS and SQL scripts for database querying.

Web Software Developer

Freelance - Various 2011-2014

- · Developed and implemented responsive and user-friendly web interfaces using HTML, CSS, and JavaScript.
- · Collaborated with design teams to translate wireframes and mock-ups into visually appealing and functional web pages.
- Ensured cross-browser compatibility and optimize web applications for various devices.
- Wrote clean, efficient, and well-documented code following industry best practices.
- Creating manual tests and execution of manual test scripts.
- Defect reporting and tracking using SharePoint.
- Providing objective feedback to software development project teams Designing tests to mitigate risks.
- Created nodes and slaves for executing the tests.

Web Software Developer

Atos 2009-2010

- · Developed and implemented responsive and user-friendly web interfaces using HTML, CSS, and JavaScript.
- · Collaborated with design teams to translate wireframes and mock-ups into visually appealing and functional web pages.
- Ensured cross-browser compatibility and optimize web applications for various devices.
- Wrote clean, efficient, and well-documented code following industry best practices.
- · Creating manual tests and execution of manual test scripts.
- Defect reporting and tracking using SharePoint.
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- · Created nodes and slaves for executing the tests.

RFP / BIDS / PRESENTATIONS / TECHNICAL INTERVIEWS

- · Played a key role in supporting numerous public sector and private sector bids, RFPs, and client presentations.
- · Demonstrated a keen ability to analyze technical requirements, offer strategic suggestions, and contribute to successful bid submissions.
- Fostered strong client relationships through proactive engagement and responsive communication, resulting in enhanced client satisfaction and project outcomes.
- Contributed significantly to the recruitment process as a member of the Technical Interview Panel.
- · Leveraged expertise in technical assessment and evaluation to identify and onboard top talent, ensuring a high caliber of staff for key roles.

EDUCATION & CERTIFICATIONS

- Masters of Science Information Technology
- Professional Certification in Machine Learning and Artificial Intelligence Imperial College, London
- Bachelor of Science Information Technology
- AWS Certified Solution Architect Associate May 2024
- AWS Certified DevOps Engineer Professional June 2024
- Microsoft Certified: DevOps Engineer Expert July 2024
- TOGAF certified Enterprise Architect Foundation
- · Harvard Certified Connected Manager
- University of Michigan Python Certification
- Python for Data Science and AI IBM
- Developing Cloud apps with Node.js and React IBM
- Tricentis TOSCA Automation Specialist Level 1&2
- ISTQB Certified Foundation Tester
- · ISTQB certified Agile Tester