AVRAAJ MATHARU

LEAD TECHNICAL ENGINEER

CONTACT

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EXPERTISE & SKILLS

- Renowned as a Technical Virtuoso, I navigate the **SDLC and STLC** with precision.
- DevOps Engineering - **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, GitHub Actions, Azure DevOps, AWS CodeBuild, AWS CodePipeline, Jenkins, Ansible.**
- Software Development - **HTML, CSS, JavaScript, Node.js, ReactJS, JSX, jQuery, APIs, and Bootstrap.**
- Cloud platforms **- AWS & MS Azure**
- Operating Systems **- Windows, MacOS, Linux, Ubuntu, Fedora, CentOS.**
- Automation Architect **- 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.**
- Data Science, ML and AI algorithms - AI/ML Alchemist providing guidance from fundamentals to advanced topics, excelling in evaluating predictive performance and navigating the landscape of deep learning. **Python, Sci-kit 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**, spearheading the implementation of cutting-edge tools and innovations across sectors like Public, Telecommunications, Procurement, Logistics, and Health.
- Serve as the **UK Representative for Global Architects**, facilitating seamless communication and collaboration, aligning strategic initiatives, and fostering a cohesive approach to technology architecture globally.
- Act as the **UK Representative for AI/ML**, leading initiatives, identifying opportunities for integration, and ensuring Sogeti excels in leveraging advanced technologies for client solutions.
- Contribute as a **Member of SogetiLabs UK**, collaborating with experts to explore emerging technologies, conduct experiments, and shape forward-thinking strategies for Sogeti's technological advancements in the UK.

WORK EXPERIENCE

Lead Technical Architect

Capgemini UK Plc (Sogeti)

UKHSA - Public Health Sector

2019-Current
2020-Current

- Achieved finalist status at the European Software Testing Awards 2022
- Led a 10-member team in developing a robust automation framework for the COVID-19 Test & Trace app across Android, iOS, and web platforms
- Utilized Java, Appium, RestAssured, Selenium, BDD, Cucumber, and Gherkin for development
- Orchestrated the establishment of a streamlined CI/CD pipeline using AWS CodeBuild, AWS CodePipeline, and GitHub Actions
- Integrated Docker containerization into the workflow with YAML and Terraform configurations
- Managed VMs, EC2 and S3 instances for seamless application deployment and data storage
- Produced comprehensive Test and Automation reports weekly, incorporating Machine Learning for insights via an ELK / OLK (Elasticsearch / Opernsearch Logstash and Kibana) dashboard.
- Developed meticulous Automation Test Strategies and plans, conducting thorough feasibility analyses
- Provided technical expertise, contributing to security and infrastructure assessments, and evaluating vendor tools using Enterprise Architecture Principles.
- * Established DevSecOps tooling standards and 'one-click' change control and deployment mechanisms

Automation Architect

Capgemini UK Plc (Sogeti)

Spirit Energy & Welsh Water - Utility Sector

2020

- Developed Test Automation framework using Tricentis TOSCA and designing automation tests for SAP SuccessFactors applications.
- Setting up the automation environment & infrastructure with VMs, VDIs, Tricentis TOSCA automation tool, Common Repository for Multi – user testing capability, Workflow Management tool, TOSCA Server for overnight test runs.
- Evaluating automation tools and technologies to be used for automation.
- Driving good coding / scripting practices & standards for developing Test Automation scripts.
- Generating daily & weekly test automation reports for technical and management audience.
- Stakeholder Management and establishing myself as a key technical point of contact.

SAP Software Development Engineer in Test

Capgemini UK Plc (Sogeti)

British Aerospace and Defence Systems

2019-2020

- Developed and implemented Automation Test Strategy and Test plan for the project.
- Evaluating Automation test tools and implementation of Test Automation from scratch.
- Developing and presenting PoC to integrate client's PLM, Workflow Management tool with Tricentis TOSCA.
- Conducting in-depth analysis of environments, infrastructure, Database, functionality of UI to create a plan for implementing Test Automation
- Conducting presentations and demonstrations with the clients, showcasing the benefits of introducing Test Automation in a manual environment to gain customer confidence.
- Implementing Tricentis TOSCA for developing automation test cases and using TOSCA server for scheduling automated test runs.
- Developing Test automation framework and automation scripts for SAP migration program from SAP r/3 to SAP S/4 HANA.
- Creating a CI pipeline using TOSCA Server / Jenkins to support DevOps architecture.

Lead Software Development Engineer in Test

Capgemini UK Plc (Contractor)

Ministry of Defence UK

2018-2019

- Maintained and executed automation scripts on Canopy Test framework using F# programming language.
- Framework 1 - Developed and maintained a robust automation framework from scratch using Java, Selenium Web driver, BDD approach using Cucumber, Gherkin and Page Object Model across the Core Test Applications and worked on multiple projects in parallel.
- Framework 2 - Developed and maintained a robust Automation framework for the MoD using JavaScript, MOCHA test framework, Grunt as a Test Runner, WebDriverIO and CHAI assertion library.
- Introduced Agile methodology (SCRUM and KANBAN) across the project to increase the efficiency of Testing and delivery.
- Played a key role in Test environment Management which included deploying the applications on Test environments hosted on Linux OS using Shell scripting commands. Also included taking snapshots, deleting snapshots, and reverting the environments to keep them up to date.
- Configuring and executing tests overnight using Jenkins and Team City to deliver the need for Continuous Integration and Continuous Deployment.
- Maintained and executed automation scripts on Micro Focus ALM and Micro Focus UFT.
- Involved in the creation of Test strategies, Test planning, developed Automation framework, executing automation scripts, and creating effective technical and non – technical reports for the business and management.
- Scheduling and automating tests using Micro Focus ALM and Micro Focus UFT 14.0
- Operational responsibility for Statement of Work activities and Team Management resulting in 100% revenue realisation.

Software Development Engineer in Test

Capgemini UK Plc

2016-2018

Royal Mail UK Plc

2017-2018

- Involved in enhancing the already existing automation framework developed using Java and Selenium to increase the productivity and test efficiency.
- Implemented REST API Automated Testing using SoapUI.
- Used Groovy scripting language to integrate tests, run test suites and feed the test data in the tests.
- Created mocks/stubs (service virtualisation) for the web service responses using Java and Groovy scripting languages.
- Conducted Sprint Planning meetings, Retrospective meetings while introducing Agile methodologies across the team.
- Involved in Automation Tool selection process for Web based and API Automation testing.
- Developed an integration mechanism between JMeter and Jenkins tools so that the API Automation tests can run with a one-click approach keeping in alignment with the DevOps architecture.

Software Development Engineer in Test

Capgemini UK Plc

Talk Talk

2016-2017

- Introduced Test Automation as a part of the Agile process for the project.
- Designed and Implemented a Selenium Automation framework from scratch using Selenium and Java, TestNG as a Test Runner, and Page Object Model for the program to reduce test cycle time, increase the test coverage and improve the quality of each release.
- Conducted workshop on Selenium, Java and TestNG for the rest of the QA community so that the automation solution created can be used across other projects.
- Created utilities for Test Data creation through Automation using Java.
- Developed and maintained a web-based automation portal using Java to have a two-way update process between Bugzilla and JIRA.
- Involved in tool selection process for Java based thick client desktop application.
- Worked as an Automation Test Lead for two parallel projects simultaneously with Hands on execution tasks also involving part time Project Management responsibility.

Software Development Engineer in Test

DHL Ltd. (Formerly UK Mail)

2014-2016

- Created automated and manual test scripts for online, mobile and web-services testing at all levels of STLC and SDLC
- Extract, Design and Development of Test Cases for both Client server and Web Applications from requirements specifications
- Performed automation of Web-Services testing in SOA environment using SoapUI.
- Performing Load testing and Stress testing using JMeter, SoapUI
- Worked in Test Driven Development environment performing automation Testing.
- Performing Alpha and Beta testing for UAT, functional testing, GUI testing, regression testing, system testing
- Generating mock responses (service virtualisation) using Service V, Service VPro, SoapUI.
- Writing Groovy scripts to input test data in the Requests, to trigger test suites, etc.
- Conducting cross browser testing (Browser compatibility)
- Executing and maintaining test repository in Team Foundation Server (TFS), Microsoft Test Management (MTM).
- Effective use of defect raising and tracking tools like Jira, SharePoint, TFS, MTM Generating periodic Test reports and providing timely updates to the Test Manager, Project Manager and Business Manager.
- Worked with RDBMS and SQL scripts to query the Database.

Front End Web Developer & QA Analyst

Best Western Shaftesbury Group Limited

2012-2014

- Developed and implemented responsive and user-friendly web interfaces using HTML, CSS, and JavaScript.
- Collaborated with design teams to translate wireframes and mockups 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.

EDUCATION & CERTIFICATIONS

- Masters of Science - Information Technology
- Professional Certification in Machine Learning and Artificial Intelligence – Imperial College, London
- Bachelor of Science - Information Technology
- Microsoft Certified: DevOps Engineer Expert
- AWS Certified DevOps Engineer - Professional
- 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

INTERNAL CAPGEMINI / SOGETI PROJECTS

GEN-AI AMPLIFIER

- Collaborated with the development team to contribute to the development of Amplifier GenAI, an in-house tool for Capgemini/Sogeti UK.
- Engaged in prompt engineering activities to develop meta prompts, contributing to the enhancement of the tool's functionality and usability.
- Took the lead in developing front-end features using JavaScript and ReactJS for various functionalities, including code generation, code refactorization, and test case generation.
- Implemented good coding practices and utilized web development features such as React Router DOM to optimize page load performance and ensure seamless user experience across different devices.
- Leveraged the Bootstrap library for UI components and responsive web design to cater to mobile, tablet, and desktop platforms.
- Actively participated in brainstorming sessions, code reviews, and team meetings to contribute ideas and solutions for improving the tool's functionality.
- Collaborated with cross-functional teams including developers, designers, and project managers to ensure smooth execution of tasks and alignment with project goals.

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.