

# Madhan Kumaravelu

✉ madhankumaravelu93@gmail.com | 🌐 madhank93.github.io | 📧 @madhankumaravelu93

## PROFESSIONAL SUMMARY

---

- With over 9 years of extensive professional experience in the IT domain, I have specialized as a Software Development Engineer in Test and DevOps, focusing on framework development and automation infrastructure
- Adept at creating and enhancing test automation frameworks that streamline testing processes, reduce manual effort, and improve overall testing efficiency
- Well-versed in crafting modular, scalable, and maintainable frameworks that cater to complex application architectures
- Skilled in container technologies such as Docker and container orchestration platforms like Kubernetes. Able to create and manage containerized test environments, ensuring consistent and reproducible testing across different stages of development
- Proficient in setting up end-to-end CI (Continuous Integration) pipelines for automated testing using tools such as Jenkins, and Github actions. Successfully integrated automated tests into the development lifecycle for rapid feedback and accelerated release cycles
- Collaborative approach to working with cross-functional teams, effectively bridging the gap between development and testing. Strong communication skills enable smooth integration of automated testing practices into agile development processes
- Demonstrated leadership in quality assurance practices, including mentoring junior team members, conducting code reviews, and advocating for best practices in testing and automation. Passionate about fostering a culture of quality within the organization
- Extensive expertise in Selenium WebDriver for automated browser testing, coupled with a deep understanding of cross-browser compatibility challenges
- Proficient in harnessing Selenium Grid and Selenoid to distribute test execution across multiple environments concurrently

## EXPERIENCE

---

### TrusTrace

#### *Devops and Lead Quality Engineer*

**Apr. 2022 – Present**

- Orchestrated pipelines for application deployments, Power BI, and ETL processes using Azure DevOps and Jenkins
- Configured and managed AWS & Azure services like EC2, Lambda, S3, EBS, CloudFront, Data factories, Azure devops and Power BI
- Created and managed cloud infrastructures using IaC tools like Terraform and Ansible
- Designed and built Docker containers for various applications, enabling seamless deployment across multiple env
- Implemented monitoring and alerting systems using tools like Prometheus and Grafana

#### *Lead Quality Engineer*

**Nov. 2021 – Mar. 2022**

- Spearheaded an SDET team, ensuring punctual delivery of quality software through effective collaboration with cross-functional teams and agile methodologies
- Architected a scalable and maintainable automation framework using Typescript and Cypress, enhancing test coverage and expediting regression testing
- Containerized test automation scripts and devised a Jenkins pipeline for parallel test execution
- Conducted API testing employing tools such as Postman, SuperTest and Mocha, validating functionality and data integrity
- Collaborated with development units to identify and mitigate performance and scalability concerns, utilizing the K6 tool to simulate user traffic and loads
- Successfully integrated Cypress tests into React application's CI/CD pipelines, collaborating with development teams to ensure automated testing on each code change
- Mentored and upskilled team members in programming, automation, and testing best practices

### Testvagrant Technologies

#### *Software Development Engineer in Test*

**Sep. 2020 – Nov. 2021**

- Developed a web automation framework to test React application using Cypress in JavaScript, seamlessly integrating it with the Jenkins CI pipeline
- Constructed and maintained a cross test automation infrastructure using BrowserStack, ensuring efficient and scalable test execution
- Executed API testing using Postman for manual checks and SuperTest library for automated procedures
- Automated pivotal business workflows and end-to-end scenarios using Mocha test framework
- Facilitated code reviews and offered insights to enhance testing processes, fostering adherence to quality standards
- Conducted comprehensive compatibility testing across browsers and devices to optimize performance and user experience

## Sysvine Technologies

### Quality Engineer II

**Feb. 2018 – Jun. 2020**

- Developed and sustained web automation testing using Cypress in JavaScript, seamlessly integrating it with the Circle CI platform
- Engaged in exploratory testing to identify defects and enhance user experience
- Generated and maintained comprehensive testing documentation, test plans, cases, and reports to ensure lucid communication of testing
- Played a pivotal role in achieving Workday global payroll partner certification
- Proficient in conducting end-to-end testing of React applications using Cypress, validating complex user workflows, UI interactions, and data integrity across multiple components and routes
- Ensured cross-browser and cross-platform compatibility to maintain consistency across diverse environments
- Worked with Jira and Qase to track user stories, bug reporting, test cases maintenance deployment processes
- Performed root cause analysis of production incidents, identifying and addressing underlying causes to prevent future occurrences

## Aiway Solutions

### Associate Systems Engineer QA

**Dec. 2015 – Jan. 2018**

- Actively participated in daily stand-ups, sprint planning, and collaborative sessions to streamline communication
- Executed rigorous functional testing, validating alignment with user requirements and specifications
- Produced and managed comprehensive testing documentation, comprising test plans, cases, and reports for transparent communication of testing processes
- Contributed to end-to-end web automation using Selenium and Java, employing a data-driven approach with Apache POI libraries
- Engaged in stand-ups, showcases, and client meetings for clear feature understanding
- Played a pivotal role in functional, regression, and retesting activities to ensure core functionality and feature stability

## TalentSprint

### Software Quality Assurance Intern

**Dec. 2014 – May. 2015**

## Certification

- Certified International Software Testing Qualification Board (**ISTQB - CTFL**) foundation level
- Certified Kubernetes Application Developer (**CKAD**), CNCF
- Google Cloud Fundamentals: Core Infrastructure, Coursera

## SKILLS

**Programming languages:** Java, and JavaScript/Typescript

**Tools and Framework:** Selenium, Cypress, Playwright, WebDriverIO, Mocha, Rest assured, Postman, Git, and Jira

**Devops:** Docker, Kubernetes, AWS, GCP, Jenkins, Sonatype Nexus, Ansible, Terraform, Azure devops and Github Actions

## EDUCATION

**Aalim Muhammed Salegh college of Engineering**

2010 – 2014