PRAKASH MAHESHWARAN

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EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science
Master of Science in Computer Science, Concentration in Artificial Intelligence — *Expected March 2026*
Cumulative GPA: 3.74/4.00 | Clark Fellowship
Coursework: , , ,

Vellore Institute of Technology, International Center for Education and Research, Bangalore, India — *March 2024*
Postgraduate Program in Computer Science (AI Track)
Cumulative GPA: 3.80/4.00
Coursework: , , ,

Anna University, Chennai, India — *March 2023*
Bachelor of Science in Information Technology
Cumulative GPA: 3.30/4.00
Coursework: , , ,

TECHNICAL SKILLS

Languages: Python, JavaScript, C, SQL, Postman
Frameworks: Flask, Django, Node.js, React.js, Express.js, FastAPI
Software and OS: Linux, Git, Selenium, Docker, UIpath, AWS, Conda
Additional: Tableau, PowerBi, Blender, Figma, Wordpress, Firebase
Certifications: Certified JavaScript Developer (CIW), AWS Certified Solutions Architect – Associate, AWS Certified Machine Learning – Specialty, IBM Data Science Professional Certificate

PROFESSIONAL EXPERIENCE

UNIQUE Technologies, QA Automation Engineer | Chennai, India — *May 2021 – February 2022*
- Developed automated test scripts using Java and Selenium for functional and regression testing purposes.
- Collaborated with development teams to design comprehensive test plans and cases for large-scale applications.
- Ensured scalability and robustness of test automation frameworks through continuous improvement and optimization.

Sun Networks, Test Engineer for Enterprise Applications | Vellore, India — *January 2020 – December 2020*
- Conducted thorough unit testing and integration testing for complex software applications using Python and JavaScript.
- Utilized CI/CD pipeline integrations for automated test execution and reporting to enhance test coverage and efficiency.
- Improved test strategy through identifying gaps and suggesting enhancements to overall test coverage and automation frameworks.

PROJECT EXPERIENCE

Automation of Regression Testing Suite | Chennai, India — *July 2022 – February 2023*
- Improved pipeline efficiency: By integrating automated testing and code review.
- Implemented Jenkins CI/CD tool: For streamlined test execution and feedback.
- Applied best practices: For optimized test script maintenance and updates.
- Resulted in 30% reduction: In production deployment time and increased code quality.

Enhancement of Performance Testing Framework | Chennai, India — *March 2022 – July 2022*
- framework: Using JMeter and Gatling for performance testing.
- Developed custom plugins: For enhanced test result analysis and reporting.
- Applied load testing scenarios: To identify bottlenecks and optimize application performance.
- Achieved 25% improvement: In application response time and user experience.

Wind Energy Renewal Prediction | Vellore, India — *May 2021 – October 2021*
- Contributed to a wind energy prediction model using real-time weather data, increasing accuracy by 15%
- Analyzed historical weather data to identify key factors impacting wind energy production
- Developed predictive models using TensorFlow to estimate energy output based on weather forecasts
- Collaborated with domain experts to validate model predictions and improve accuracy

WHITE PAPERS & PREPRINT PUBLICATIONS

Enhancing Test Automation with AI-Driven Insights | International Journal of AI Research — *April 2023*
- Leveraging machine learning algorithms to predict test outcomes and optimize test suites for improved efficiency and coverage.
- Implementing natural language processing for automated test case generation and prioritization based on business requirements.
- Integrating AI-powered tools for real-time defect prediction and automated test script maintenance for reduced downtime and increased quality.

AI-Streamlining CI/CD Pipelines with Automated Testing and Feedback | Preprint Archive — *January 2023*
- Designing and integrating automated testing frameworks within CI/CD pipelines for real-time test execution and feedback.
- Utilizing containerization and orchestration tools for scalable and efficient test environment management and deployment.
- Developing metrics and dashboards for data-driven decision-making and continuous improvement of testing processes and product quality.

LEADERSHIP EXPERIENCE

Students Guidance Cell, Event Coordinator | Chennai, India — *28 Months*

Coordinated and organized over 15 student development events, improving engagement and support services for 500+ students across various academic programs.

U&I, Volunteer Teacher (Math & Computer Science) | Vellore, India — *12 Months*

Taught math and computer science to underprivileged students for 12 months, helping improve academic performance and providing accessible education to over 30 students.

ACHIEVEMENTS AND AWARDS

- Finalist in Smart India Hackathon 2019
- Winner of Coding Challenge at Chennai Tech Fest
- Speaker at Bangalore Student Developer Conference
- National Runner-Up in HackMIT India