MD ASIFUR RAHMAN

asifurrahman1 | asifur-rahman-33121892 | Online portfolio | Google Scholar
asifurrahman1@gmail.com
Unit 34, 116 Blamey Crescent, Campbell, 2612, ACT, Australia | Contact: +61-430403636
(On Postgraduate (PhD) Spouse VISA, Subclass 500 till 2026 with no work limitation)

EXPERIENCE

Seeing Machines Ltd. Canberra, Australia
Test Lead, Product Feature Development Team April 2024 – March 2025

- Managed test plans and facilitated product releases in alignment with ASPICE standards, ensuring full traceability within the V-model framework.
- Oversaw CI/CD automation by creating and managing Jenkins pipelines.
- Developed qualification test automation tools using Python, Pytest, and Groovy scripts.
- Designed and implemented integration tests using Enterprise Architect to support consistent and traceable system development.
- Managed test specifications, test cycles, and executions in JAMA; automated test scripting via JAMA.
- Synchronized master and release branches in GitHub and maintained configuration item lists.
- Identified and led process improvements by standardizing test data (EOD), reducing test failures, and automating weekly test analysis to enhance bug triaging and feature coverage.

Qorvo Inc. Greensboro, USA
Test Engineer (Internship), Automotive Test Development Team May 2023 - Aug 2023

- Conducted automated semiconductor chip testing using programming languages such as C++, Python, and Bash; generated analytical reports including ANOVA and correlation analysis.
- Developed pattern conversion libraries for RedDragon and Unison Operator tools using C and C++.
- Identified a process gap and built a "Test Request and Resource Management System", improving productivity by 10% and resource utilization by 15%; led training sessions for adoption.
- Contributed to a Python-based code generator to enhance testing automation.
- Completed training on PAx Application by COHU
- Operated testers (PAx, DMDX) via Linux shell during test execution and evaluation.

Wake Forest University Winston-Salem, North Carolina, USA
Graduate Research Assistant Jan 2022 - Dec 2023

- Contributed to an NSF-funded project (#2105007) on safe reinforcement learning; developed the task-agnostic Safe-RL algorithm, published at IJCAI 2023.
- Built and trained RL agents in Python using PyTorch, TensorFlow, Keras, RLlib, RayTune, and Weights & Biases for performance evaluation.
- Managed and executed large-scale experiments on Wake Forest University's HPC cluster using Docker, virtual environments, and Git/GitHub for streamlined development.
- Mentored undergraduate lab members through regular guidance and hands-on support, helping them strengthen their skills in reinforcement learning research.

Rajshahi University of Engineering & Technology Rajshahi, Bangladesh
Assistant Professor, Department of Computer Science & Engineering May 2021 - Dec 2021

- Applied project-based learning and flipped classroom techniques to boost engagement in Software Engineering, C/C++, and OOP courses.
- Fostered inclusive learning through group projects, peer assessments, and discussions, increasing participation and comprehension.
- Conducted assessments and delivered timely feedback to track student progress and address learning gaps.
- Supported interdisciplinary research and involved students in real-world problem-solving activities.

Rajshahi University of Engineering & Technology Rajshahi, Bangladesh
Lecturer, Department of Computer Science & Engineering July 2017 - April 2021

- Delivered lectures and lab sessions on core CS topics including C programming, Analytical Programming, and Data Structures, adapting to varied learning styles.
- Supervised undergraduate research projects, leading to publications and national conference presentations.
- Coordinated with industry partners to facilitate internships and hands-on learning experiences.
- Advised student clubs, promoting leadership, teamwork, and extracurricular engagement.

Daffodil International University Dhaka, Bangladesh
Lecturer, Department of Software Engineering Jan 2017 - April 2017

- Designed course content and assessments aligned with industry and accreditation standards for courses including C Programming, Object-Oriented Programming, and Software Engineering.
- Integrated real-world examples to bridge theory and practical understanding.
- Attended faculty development programs to improve teaching effectiveness.

EDUCATION

Wake Forest University, Winston-Salem, North Carolina, USA — Jan 2022 — Dec 2023
Master of Science in Computer Science — GPA: 3.92 out of 4.00
Dissertation: Task Agnostic Safe Reinforcement Learning

Rajshahi University of Engineering & Technology (RUET), Rajshahi, Bangladesh — Feb 2012 — Oct 2016
Bachelor of Science in Computer Science & Engineering — GPA: 3.74 out of 4.00
Dissertation: An adaptive background modeling based on modified running Gaussian average method

Skills and Expertise

- **Languages:** Native Bengali; fluent in English.
- **Programming:** Python, C++, C, Java, JavaScript, TypeScript, Groovy Script, Bash; experience with Pytest, CppTest, and Google Test.
- **Web & App Development:** React Native, Expo, Axios, FastAPI, Django REST, HTML5, CSS, Bootstrap, Laravel, Android (Java), iOS, PHP.
- **Tools & Platforms:** Jenkins, Git, GitHub, Docker, JIRA, JAMA, Enterprise Architect, Smartsheet, Figma, Mural, Balsamiq, Qualtrics, Visual Studio Code, LaTeX.
- **Databases:** MySQL, MongoDB, Azure SQL.
- **Cloud & DevOps:** AWS (EC2, Lambda), CI/CD pipelines, Linux system administration, scripting in Bash, version control.
- **Python Libraries & Frameworks:** PyTorch, TensorFlow, Keras, Scikit-learn, NumPy, Pandas, Matplotlib, Ray Tune, Weights & Biases (W&B).
- **Software Engineering and Testing:** Object-oriented design, SDLC, Agile methodology, Test automation, Qualification and Integration testing, ASPICE, V-model, Software Traceability, Configuration Item List management.
- **Machine Learning & MLOps:** Supervised and unsupervised learning, deep learning (CNNs, GANs), reinforcement learning (Safe-RL), contrastive learning, federated learning, and data pipelines. Experienced with LLMs such as Ollama and Hugging Face models.
- **Research Areas:** Reinforcement learning, imitation learning, explainable AI (XAI), LLMs, model fairness, clustering, inverse reinforcement learning (IRL), model stability, and parallel & distributed machine learning.
- **Communication & Leadership:** Strong written and verbal communication, teaching and mentoring, team leadership, academic supervision, cross-functional collaboration.

HONORS AND AWARDS

- Wake Forest University Alumni Travel Grant — 2023
- Rajshahi University of Engineering & Technology Merit Scholarship — 2012—2016
- Secondary School Merit Scholarship, Dhaka Board — 2010—2011

REFERENCES

Available upon request