

Booshra Nazifa Mahmud

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PROFESSIONAL SUMMARY

Detail-oriented Computer Science graduate with hands-on experience in technical support, incident management, and backend development. Skilled in diagnosing and resolving application, API, and infrastructure issues, collaborating with cross-functional teams, and leveraging monitoring tools to ensure system reliability. Proficient in **AWS**, **RESTful APIs**, scripting, and agile workflows, with a strong focus on improving system uptime, documenting processes, and enhancing support efficiency.

EDUCATION

Master of Science in Computer Science	Carleton University
Bachelor of Science in Computer Science and Engineering	BRAC University

SKILLS

Programming & Development: Python, Java, JavaScript, Node.js, React.js, RESTful APIs, GraphQL, Postman, Agile, Git, CI/CD, System Architecture

Cloud, Systems & DevOps: AWS (Lambda, DynamoDB, EC2, S3), Docker, API Security Principles, UNIX/Linux, Windows, SRE Collaboration

Data Engineering & Troubleshooting PostgreSQL, MySQL, MongoDB, Data Modeling, Debugging, Performance Tuning Tools: GitHub Actions, Bitbucket Pipelines, Jenkins, OAuth, Integration Testing

WORK EXPERIENCE

Teaching Assistant – Web Applications and Software Engineering	September 2022 – April 2024
Carleton University	Ottawa, ON

- Led lab sessions and tutorials on **Web Applications and Software Engineering**, emphasizing system architecture, microservice design, and backend development using **Java** and **JavaScript**.
- Mentored students in debugging, performance tuning, and secure coding practices while guiding hands-on work with **HTML/CSS**, **JavaScript**, **React**, and **Node.js** in lab environments.
- Collaborated with instructors to design hands-on projects reflecting real-world **agile** workflows and **DevOps** principles.

Analyst (Co-op)	Jun 2023 – Aug 2023
Carleton University – Scheduling & Examination Services	Ottawa, ON

- Redesigned and launched an [external exam](#) proctoring page using **WordPress** and **Gravity Forms**, improving content usability and increasing traffic by **25%** in 2 months.
- Collaborated with **UX designers** and academic staff to refine UI content and improve the usability of the proctoring service.

Software Developer	Jan 2020 – Nov 2021
Monico Technologies Limited	Dhaka, Bangladesh

- Developed a scalable backend systems using **Django/React**, integrating and optimizing **RESTful APIs** and **GraphQL** for seamless client-server communication, improving system responsiveness by **35%**.
- Tested **REST APIs** in **Postman**, conducted end-to-end application testing during feature rollouts, and managed backend data operations using **PostgreSQL** to ensure system stability and functionality.
- Participated in defect resolution and iterative improvements to backend services; emphasized writing clean, reusable code, maintained source repositories via **Git**, and contributed to updating and organizing **API documentation**.
- Deployed internal web apps on **AWS (IaaS)**, configuring cloud environments for secure, scalable, high-availability deployments.
- Optimized SQL query efficiency by **40%** using **Python scripts** for CRUD operations and database updates, ensuring **99.9% uptime** for third-party API integrations and improving deployment consistency across environments.

PROJECTS

[Enhancing Cataract Surgery Assessment through AI](#) | Computer Vision, **Python**, ResNet, ViViT, TensorFlow, PyTorch

- Developed deep learning models for phase recognition and tool detection in surgical videos using **ResNet** and **ViViT** architectures, optimized in **Python** with **TensorFlow** and **PyTorch**.

[Network Intrusion Detection using Random Forest and Neural Networks](#) | **Python**, Machine Learning

- Developed a **Python**-based intrusion detection system with **NumPy** and **PyTorch**, increasing detection accuracy by 25% in a distributed environment.