RADWAN HOQUE

Education

Rutgers University Expected Graduation: Fall 2026

Bachelor of Information Technology — Labor Relations

New Brunswick

Work Experience

Rutgers Cancer Institute

 $\mathbf{June}\ \mathbf{2025} - \mathbf{Aug}\ \mathbf{2025}$

Research Assitant

New Brunswick

- Engineered a Full Stack Web app using JavaScript/Node.js and CSS frontend, Python Flask functions, and tested in the Cloud, to match cancer patients to a fitting clinical trial, improving physician operation efficiency
- Explained the technical trade-offs of a PostgreSQL system, Cloud-based backend, and open-source APIs, to non technical supervisors cross functionally via live demos and powerpoints which secured funding
- Designed 20+ AWS Lambda Functions in Python, strategically leveraging Lambda layers to increase the re-usability by 52%, resulting in cost savings of \$1,000 per large scale deployment to fit the budget of the research project

Quran With Maryam

June 2024 - Aug 2024

Backend Engineer Intern

Remote

- Refactored EC2-based backend to Lambda + DynamoDB architecture, eliminating 50% of infrastructure costs and regulating cloud expenditures
- Architected 10+ server less workflows using AWS Step Functions, seamlessly integrating REST APIs and rigorously
 tested with Postman, resulting in a reduction in execution time
- Rebuilt mobile application from React Native to Flutter due to performance limitations, successfully implementing advanced features that were previously unachievable and improving app responsiveness.

I-Corp Fellowship Spring 2025

Co-Entreprenurial Lead

New Brunswick

- Networked with a diverse group of experienced engineers, scientists, and students in a competitive fellowship program, leading the product-market-fit initiaive of an IP over a 9-week period
- Interviewed 25+ decision makers from the Biotech sector, conveying our product in a non-technical manner, and received constructive criticism which enabling a pivot in our approach

HB International Jun 2023 – Sep 2023

Technical Support

Remote

• Troubleshot issues for 100+ customers as IT support and collaborated in agile sprints to prioritize fixes and issues.

Projects

 $\textbf{TextSimplifer} \mid \textit{Website} \mid \textit{Source Code}$

- Designed and built a Full-Stack AI web app using JavaScript/Node.js, CSS and Docker, aimed in helping learners comprehend technical jargon
- Resolved TypeScript PDF upload failures by migrating to AWS S3, improving system reliability and user experience
- Developed a RESTful Express.js proxy to orchestrate chained API calls to GCP and OpenAI
- Automated infrastructure deployment using Infrastructure as Code in a CI/CD pipeline with GitHub and Jenkins

Cerebrix | Website

- Developed a Full-Stack web application, using React.js, Next.js, and Supabase to create adaptive minigames that provided cognitive stimulation for Alzheimer's patients.
- Streamlined CI/CD pipeline by resolving Vercel deployment authentication constraints, implementing a git workflow strategy to maintain continuous deployment capabilities

Leadership

Data Science Club | November 2024 - Present

- Led data analysis workshops for 30+ members, teaching Python libraries (Pandas, NumPy, Scikit-learn) and statistical modeling techniques through hands-on projects
- Delivered technical workshops on time series forecasting, clustering algorithms, and dimensionality reduction (PCA, t-SNE) for predictive analytics applications