

Md Saeem Hossain Shanto

Software Engineer | AI/ML Researcher | Full-Stack Developer

Adelaide, SA, Australia | saeem@coderooffice.com.au

[Portfolio](#) | [LinkedIn](#) | [GitHub](#) | [Google Scholar](#)

Professional Profile

Master of Artificial Intelligence and Machine Learning student at Adelaide University with experience in full-stack software development, mobile applications and applied AI research. Skilled in building applications using **Flutter, Django, Django REST Framework, PostgreSQL, Redis, Supabase and Next.js**. Published researcher with work in federated learning, natural language processing, machine learning systems and misinformation analysis. Seeking part-time, internship, graduate or research opportunities in software engineering, AI/ML and application development.

Education

Adelaide University

Master of Artificial Intelligence and Machine Learning

- Current GPA: **6.33/7.00**; Global Citizens International Scholarship recipient.
- **Relevant coursework:** AI and machine learning foundations, generative AI, computer vision and multimodal machine learning, ethics, privacy and security in AI, programming for AI and machine learning, project management, and industry research.

North South University

Bachelor of Science in Computer Science and Engineering

- CGPA: **3.50/4.00**.
- Focused on software engineering, artificial intelligence, machine learning, databases, algorithms and web development.

Professional Experience

Co-Founder & Application Developer

CodeRoffice | Adelaide, SA (coderooffice.com.au)

- Co-founded an Adelaide-based software business delivering web, mobile and business applications for small organisations and emerging ventures.
- Build full-stack applications using **Flutter, Django, Django REST Framework, Next.js, PostgreSQL, Supabase and Redis**, with REST APIs, authentication, role-based access and responsive interfaces.
- Manage product planning, testing and production deployment using **Git, Linux, Nginx, PM2, Cloudflare and VPS infrastructure**.

Academic Integrity Ambassador

Adelaide University | Adelaide, SA

- Support academic integrity awareness through student engagement, educational activities and university events.
- Explain academic integrity expectations and direct students to appropriate academic and learning support services.
- Collaborate with university staff and student ambassadors to develop inclusive and engaging awareness activities.

Software Engineer Intern

RedDot Digital Limited / ROBI | Dhaka, Bangladesh

- Supported enterprise workflow and application development using **ProcessMaker 4, Laravel, Vue.js and relational databases**.
- Assisted with interface improvements, workflow configuration, debugging, testing and technical documentation.
- Contributed to Agile development activities and collaborated with technical and business teams during delivery.

Research Associate

Indian Research Academy | Remote

- Conducted literature reviews, data preparation, information verification and structured research reporting.
- Supported Python-based data analysis and research workflows.
- Maintained organised documentation and contributed to reproducible, evidence-based research processes.

Graduate Assistant

North South University | Dhaka, Bangladesh

- Supported academic staff and students with course coordination, laboratory activities, educational resources and technical guidance.
- Helped students understand programming and computing concepts through clear explanations and practical support.
- Prepared and maintained academic documentation while meeting university deadlines and quality requirements.

Selected Projects

Inventro – Multi-Tenant Inventory Management Platform

[Live API](#)

- Developing a cross-platform inventory platform using **Flutter, Riverpod, Django, Django REST Framework, PostgreSQL, Supabase, Redis and Django Channels**.
- Designed organisation and store isolation, role-based access, barcode support, audit logging and company-scoped product management.
- Implemented a stock ledger as the transaction source of truth and real-time inventory updates across connected devices.

Coderoffice Business Website

- Developed and deployed a responsive business website using **Next.js, TypeScript and modern CSS**.
- Managed production deployment using a Linux VPS, Nginx, PM2, Cloudflare and domain configuration.

RoomScout Adelaide – Rental Discovery Platform

- Co-founded and developed a platform intended to help students and residents discover rental accommodation in Adelaide.
- Contributed to product planning, responsive interface development, application structure, database design and deployment.

Other Projects: [NSU ACM Student Chapter Platform](#), Nova's Story Book and [Personal Portfolio](#)

- Built web and cross-platform applications using Next.js, Django, Flutter, Dart and Vercel, with an emphasis on responsive design, reusable components and maintainable code.

Selected Publications

- **Assessing Infodemic in the Post-COVID-19 Risk Communication and Governance.** Global Development Network Working Paper Series, No. 94, 2025. [DOI](#)
- **Combining Natural Language Processing and Federated Learning for Consumer Complaint Analysis.** *SN Computer Science*, 2023. [DOI](#)
- **Evaluating Multi-Core Performance of Machine Learning Models Across Different Computing Environments.** IEEE ICCCNT, 2023. [DOI](#)

Technical Skills

Programming: Python, Dart, JavaScript, TypeScript, Java, SQL, PHP, C and C++

AI and Data: PyTorch, TensorFlow, Scikit-learn, Pandas, NumPy, NLP, federated learning, deep learning, model training and evaluation

Application Development: Flutter, Riverpod, React, Next.js, Vue.js, Django, Django REST Framework, Django Channels, Laravel and REST APIs

Databases and Deployment: PostgreSQL, Supabase, Redis, MySQL, SQLite, Git, Docker, Linux, Nginx, PM2, Vercel, Cloudflare and VPS hosting

Leadership and Achievements

- **Chair, NSU ACM Student Chapter, 2023:** led a chapter of more than 100 members and coordinated teams, technical activities and student events.
- **First Runner-Up, NSU Capstone and Innovation Challenge, Season 12:** recognised for a university software and innovation project.
- **Instructor, Hour of Code, 2021:** supported introductory programming and computing education activities.

Additional Information

Research Interests: Federated learning, natural language processing, computer vision, multimodal AI, generative AI, misinformation detection, healthcare AI and responsible AI

Languages: Bengali (Native), English (Fluent), Hindi (Conversational)

Australian Work Rights: Valid student visa work rights; up to 48 hours per fortnight during study periods and full-time during scheduled university breaks

References: Available upon request