Suhaila Mohammed

Email | Github | LinkedIn | Google Scholar

Publications

Bin Zahir Arju, Md. Z., *et al.* (2025). **"Deep-learning enabled rapid and low-cost detection of microplastics in consumer products following on-site extraction and image processing"**. RSC Advances, 15(14), 10473–10483. https://doi.org/10.1039/d4ra07991d ↗

Suhaila, *et al.* 'Detection of faces masks using artificial intelligence to operate automated doors' in Algorithms for intelligent systems, 2022, pp. 363–378. doi: 10.1007/978-981-19-6004-829 ↗

Education

Independent University, Bangladesh (IUB)   **Dhaka, Bangladesh**
Bsc. Computer Science and Engineering   *Sept. 2019-August. 2023*
Distinction: **Cum Laude**
CGPA: 3.79/4.00
Relevant Coursework: Data Structures, Algorithms, Artificial Intelligence, Databases.

Work Experience

Chaldal Ltd   **Dhaka, Bangladesh**
Software Engineer L3   *Feb. 2025- Mar.2025*

- Spearheaded the development of an **inventory investment platform** using ReactJs and Node.js, enabling internal stakeholders to monitor and allocate funding more efficiently.
- Led a data-driven churn analysis using Python and SQL to identify at-risk customers; **resurrected 40% of dormant users in 2 weeks** through targeted campaigns.

Software Engineer L2   *Mar. 2024- Jan. 2025*

- Developed a GSM/UCS-2 SMS billing validator in C#, eliminating mischarges and ensuring **100%** compliance with telecom encoding standards.
- Led the development and launch of the Biniyog funding page, enabling seamless processing of over **$300,000** in user contributions across multiple rounds.
- Delivered an internal LLM bootcamp session to around 40 engineers, covering the history and practical applications of LLMs.
- Mentored junior engineers in technical and project-related aspects, improving team onboarding efficiency by **30%**.

Software Engineer L1   *Aug. 2023- Feb. 2024*

- Refactored address flow UX on web platform, reducing user navigation time by **60%** through simplified forms and optimized geo-lookup.
- Participated in 24/7 on-call rotations, maintaining $< 2h$ MTTR across 15+ production incidents.

Software Engineer Intern   *Feb. 2023- Jul. 2023*

- Revamped the company's landing page UI, boosting conversion by **25%** as measured by completed purchases.
- Localized app interfaces to Bangla, increasing regional app downloads by **20%**.

Independent University, Bangladesh(IUB)   **Dhaka, Bangladesh**
Undergraduate Research Assistant   *Dec. 2022-Jun. 2024*
Worked under a funded research project "*Application of biomedical signal processing,
analysis, and classification to identify the biomakers of stroke for early prediction and post-stroke recovery*".

Teaching Assistant   *Jun. 2021-Dec. 2022*
- CSE101 Fundamental Computer Science.
- CSE203 Data Structures.
- CSE307 System Analysis and Design.

Key Skills

- **Languages:** Python,TypeScript, JavaScript, C++, C#, Java, LaTeX.
- **Web & backend:** Node.js, REST API, .NET, FastAPI, Django.
- **ML/Data:** NumPy, Pandas, OpenCV, MATLAB
- **Frameworks:** React JS, React Native, MobX.
- **Cloud/Infra:** Azure (SQL, Portal), Redis Stack, Snowflake, Git

Projects

Personal Book Recommendation System ⎘ Designed and deployed a backend using **FastAPI** to serve personalized book recommendations based on **TF-IDF and cosine similarity algorithms**; integrated Goodreads and Google Books APIs for diverse sourcing.

Call Spam Filtering System using Redis Built a Redis-based spam filter using **Bloom filters**, reducing spam call throughput by **90%** and improving backend response times by **35%**.

Targeted Coupons for Chaldal Customers Spearheaded frontend development for a collaborative project that launched four targeted coupons, boosting Chaldal's sales by **20%** in 2024.

Student Enrollment System ⎘ Built a **Django-based** student information portal for IUB officials, integrating **MySQL analytics** on revenue and enrollment metrics.

Achievements

- **Vice Chancellor's List —** Independent University, Bangladesh   *2021-2023*
  Awarded to the top 20% of students across the university for
  outstanding academic achievement.

- **Academic Excellence Scholarship —** Independent University, Bangladesh   *2020-2022*
  Awarded 100% scholarship for maintaining an excellent
  academic record for three consecutive semesters.

- **Dean's Honour Award —** Independent University, Bangladesh   *2020-2021*
  Recognized for attaining a CGPA of 3.76 or more in the
  second successive semester.