ABDULLAH AZIZ SHARFUDDIN

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RESEARCH INTERESTS

Distributed Systems, Artificially Intelligent Systems, Databases

EDUCATION

B.Sc. in Computer Science & Engineering,   Aug. '19
Shahjalal University of Science & Technology

   CGPA: *3.26/4.00*

PUBLICATIONS

Peer-Reviewed Conference Publication:

1. **AA Sharfuddin**, MN Tihami, MS Islam A Deep Recurrent Neural Network with BiLSTM model for Sentiment Classification, International Conference on Bangla Speech and Language Processing (ICBSLP), Sylhet, Bangladesh, 2018, pp. 1-4, doi: 10.1109/ICBSLP.2018.8554396.

PROFESSIONAL EXPERIENCE

Senior Engineer, *bKash Ltd*, Dhaka.
Software Research and Engineering   Jan. '23 - Present
Senior Backend Developer for the Largest Mobile Financial Service in Bangladesh with 70M+ customer base.

- Engineered a new method for onboarding a new segment of the population to widen the customer base;
- Converted legacy services to reactive architecture, improving scalability and performance by 30% ;
- Introduced a fast and efficient dynamic document generation service for the most revenue generating service;
- Developed APIs introducing new features in the pay-bill service;
- Added new features to the internal biometric verification service

Skills: *Spring Boot, Java, DynamoDB, MySQL, Docker*

Senior Backend Engineer, *Hash Solution*.   Jan. '23 - Jul. '23
Senior backend engineer for a tax automation tool for individual and enterprise businesses.

- Designed the backend architecture from the ground up along with models and data flow;
- Developed user management and identity modules for seamless user onboarding with an easy-to-manage multi-factor authentication system;
- Engineered a bulk import export engine for managing reports and entities creating a pleasant user experience;
- Designed and developed a generic payment solution on top of stripe including both one-time and subscriptions;
- Hired and trained new joiners;

Skills: *Fiber, Golang, DynamoDB, Redis, Stripe, Docker*

Software Engineer, *SELISE Digital Platforms*, Dhaka.   Aug. '19 - Dec. '22
Full-stack software engineer for B2B, B2C products and internal core platform.

- Lead a team of 6 developers conducting internal technical consultancy, planning, and product release;
- Engineered the first SAML-based SSO in the internal identity service;
- Engineered distributed tracing and motoring service using open-Telemetry improving developer productivity and faster bug fixing;

- Engineered distributed computing for a matching tool improving performance and better user experience leveraging message-driven architecture;
- Developed reuse-able front-end components and services;
- Improved efficiency and performance of existing core platform APIs and services;

Skills: *.Net, .Net Core, C#, Angular, TypeScript, JavaScript, GraphQL, MongoDB, Redis, RabbitMQ, Docker*

RESEARCH EXPERIENCE

Undergrad Research Assistant, *SUST NLP Group*, Sylhet.   June. '18 - Apr '19

Assigned Project: Bengali text classification.

- Performed benchmarking with deep learning models for small datasets;
- Developed a platform for crowdsourcing the annotation of classification dataset collected from the comment section of the news portals;
- Conducted workshop and study sessions for junior year students;

SELECTED PROJECTS

e-POS

Fullstack web-based POS solution with administration feature. It was developed with NodeJs to aid gas stations in managing their sales and staff. It featured a role-based access control to ensure inventory and cash register security. It also featured keeping records of loans and an automated notification system for scheduled payments and tasks.

Lekhoni

An Android app to teach kids how to write Bengali alphabets. It has two modes, guided and unguided. In the guided mode the app will show an alphabet and a kid can draw the figure presented on the screen. In unguided mode, a kid can draw an alphabet and get feedback if it was written correctly. The feedback was calculated using a pertained OCR model for Bengali alphabets.

MediAlert

An Android app for medical alerts. You can upload a prescription and your medicine routine. The app will remind you to take medicines on time.

P2P Solution

A peer-to-peer chat and file-sharing desktop app that connects two devices on the same network or devices with public IP, using their IP addresses and designated port numbers. It uses Java Socket to communicate with each other. Used OOP and Software design principles to ensure fast connectivity, data management, and modular system design.

LEADERSHIP EXPERIENCE

CAM SUST, The astronomical organization at the university.   Sylhet

Asst. Treasurer (Research & Development)   Apr. '17 - Apr. '18

- Looked over the finances for the club.
- Managed sponsorships to hold Astro Olympiads and cultural programs.
- Redesigned the membership policies and activities to increase engagement.

Executive Member   Apr. '16 - Mar. '17

- Organized weekly study sessions and competitions.

SUST CSE Society, A departmental organization for all the students and teachers.   Sylhet

Executive Member   Apr. '16 - Apr. '19

- Co-convened CSE Carnival 2017 featuring programming contests, robotics contests, and project showcasing.

General Member   May. '15 - Mar. '16

- Co-organized CSE Carnival 2015.

Team DHUMKETU, A team in the inter-discipline football tournament. Sylhet
Manager Aug. '17 - Jul. '18
- Recruited and managed a team of 10 players.
- Raised funds to support the team.
- Led team to a second runner-up finish in the league championship.

NHSPC Boot Camp Jashore
Instructor Feb. '17
- Conducted several workshops on data structure and algorithms for high school students.

ACHIEVEMENTS

2019 Awarded **Best** idea in 3-minute idea presentation at a Bangla symposium.

2019 **Finalist** among 112 Teams at Robi Datathon, for fintech prediction model.

2018 Awarded **first runner-up** for presenting posters for academic research at ICBSLP.

TECHNICAL SKILLS

Languages	Java, Python, C#, Go, JavaScript, C++, SQL
Frameworks	Spring Boot, .Net core, Angular, ExpressJs, Fiber, RabbitMQ
Machine Learning	PyTorch, OpenCV
Databases	DynamoDB, MongoDB, MySQL, Redis
OS	Linux, MacOS, Windows
Software & Tools	LaTeX, Bash, MS Office

REFERENCES

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