

Shuhan Mirza

[+8801621416121](tel:+8801621416121) | shuhan.mirza@gmail.com | [linkedin.com/in/shuhanmirza](https://www.linkedin.com/in/shuhanmirza) | github.com/shuhanmirza | [medium blog](#)

I craft scalable, distributed, and enterprise-grade products that solve real-world problems for millions of users. I can manage cross-functional teams. I actively contribute to open-source and academia.

TECHNICAL SKILLS

Languages: Java, Go, JavaScript, Shell

Frameworks: Spring Boot, Gin Gonic, Hyperledger Fabric

Databases: DynamoDB, PostgreSQL, SQLite, Firebase, Redis

Cloud: AWS (EC2, Lambda, S3, SQS, KMS, Cognito, Kinesis), Hetzner

Previously Worked With: Python, Android, WordPress, Django, Fastapi, Vue

PROFESSIONAL EXPERIENCE

bKash Limited

Dhaka, Bangladesh

Assistant Lead Software Engineer

May 2023 – Present

- Collaborated with the Technical Lead on strategic planning and decision-making for 6+ projects (e.g. Binimoy, bKash-to-bank) of the *Bank Integration Team*.
- Provided technical guidance and mentorship to junior engineers, ensuring timely delivery by efficient teamwork.
- Conducted assessments of 20+ mid-level engineers for the *Bank Integration Team*.
- Involved in all phases of agile including the requirements analysis, architecture design, development, testing, deployment, and ongoing support for the bKash customer app which has a user base of over 75 million.
- Led the implementation of the VPN detection service which substituted a 50k dollars/year third-party service.
- Spearheaded multiple rapid prototyping initiatives, such as migrating an authentication service to Golang, adopting GraphQL for app configuration, using JSON schema to configure static sites, etc.
- *Tech Skills:* Java, Golang, Spring Boot, AWS, Docker, Redis
- *Soft Skills:* Management, System Design, Timely Delivery, Prioritization

Senior Software Engineer

April 2021 – April 2023

- Enhanced PIN security by redesigning encryption methods and implementing a Vue component and Spring Boot API. The solution was later integrated into 3 additional products, optimizing their security measures.
- Successfully bypassed a third-party API delivery delay, enabling merchant onboarding to be completed six months ahead of schedule by creating a Python Tkinter and Selenium automation software.
- Resolved high-severity security bugs in credential encryption and API authorization through comprehensive code reviews, ensuring robust protection of sensitive data.
- Formalized Event Pipe-Lining which is used by 40+ micro-services by developing a library using Spring AOP.
- Improved latency and reduced DynamoDB cost by implementing caching using Redis for configurations.
- Streamlined code reviewing strategy for 3 development teams by organizing a tech session.
- Implemented key features such as autopay notification, account-closing async tasks, CMS configuration, etc for the bKash app backend.
- Planned and implemented scripts for migrating multiple large DynamoDB Tables.
- *Tech Skills:* Java, Golang, Javascript, Python, Spring Boot, Vue, AWS, Docker, Redis
- *Soft Skills:* System Design, Timely Delivery

Progoti Systems Limited

Dhaka, Bangladesh

Software Engineer

September 2019 – March 2021

- Implemented key features such as merchant sign-up, login, PIN setup, PIN management, user referral, SureCash wallet integration, notification inbox, and settings within the Android app and Django API of TallyKhata.
- Streamlined the testing process by incorporating Firebase Test Lab into the software development life-cycle (SDLC), resulting in substantial time and effort savings.

Infosapex Limited

Dhaka, Bangladesh

Software Engineer

May 2019 – August 2019

- Developed the dashboard for B2B clients by incorporating jQuery, Bootstrap, and Django REST Framework.

Panda Electronics

Sylhet, Bangladesh

Web Developer

February 2018 – March 2019

- Integrated several plugins to the e-commerce website and developed Python scripts for Social Media marketing.

OPEN SOURCE PROJECTS

SimplePdfGenAPI | *Java, SpringBoot*

github.com/shuhanmirza/SimplePdfGenAPI

- PDF Generator REST Service that can be deployed out of the box. It can generate PDFs from LaTeX and HTML Templates.

Surelink | *Go, Javascript* | surel.in

github.com/shuhanmirza/surelink

- Simple URL shortening service with transparency in mind. Shows a link preview before forwarding.
- Developed backend using Gin Gonic and frontend using VueJs. Utilized PostgreSQL and Redis.

SUSTCast | *Java, Python*

github.com/sustcast/sustcast

- Fully automated online radio platform servicing over 2000 students of Shahjalal University of Science and Technology.
- Developed mobile application using Android Java and backend service using Python3. Utilized Firebase real-time database for storage and IceCast for broadcasting audio.

Quarks | *Go, JavaScript*

github.com/shuhanmirza/quarks-network

- Developed this Proof-of-Concept using Hyperledger Fabric for our research paper titled "Quarks: Secure and Decentralized Blockchain-Based Instant Messaging Network" which has been accepted in IEEE CSCloud 2023.

More on my GitHub github.com/shuhanmirza

LEADERSHIP AND AWARDS

- *Bkash STAR Award* (team), 2021 for time-to-market delivery of bKash Business Dashboard.
- *Award of Merit*, 2021 & 2020 in the International Blockchain Olympiad out of 600+ teams worldwide.
- Championship title in more than 10 National Level Hackathons and Robotics Competitions between 2015 to 2018.

EDUCATION

Shahjalal University of Science and Technology

Sylhet, Bangladesh

BSc. in Computer Science and Engineering (CGPA: 3.83/4.00)

March 2015 – March 2019

General Secretary of Robotics Club (RoboSUST)

CERTIFICATIONS

- Certified Blockchain Architect™ | Issued by **Blockchain Council**
- Certified Payment Industry Security Implementer - Developer (CPISI-D) | Issued by **SISA**

RESEARCH AND ACADEMIA CONTRIBUTIONS

- *Consultant, Technovative Solutions, UK* | Contributed to system design of federated ML nodes in the EU-funded project TRUStworthy Multi-site Privacy Enhancing Technologies.
- *Research Engineer, Cryptic Consultancy Limited, UK* | Spearheaded the research and development of MVP version of an enterprise blockchain solution designed for a financial institution using Hyperledger Fabric.
- *Research Assistant, Blockchain and Security Lab (SUBSeL), SUST* | Contributed to the research and development of a university-funded project focused on Blockchain and Identity management.
- Served in Technical Program Committee of multiple international conferences and workshops focused on Blockchain, Cryptography, and Security.
- Wrote several Medium articles with more than 20K views. Checkout medium.com/@shuhanmirza
- Co-authored several conference papers focused on Blockchain and Security. Checkout [My Google Scholar](#).