

# ASHRAK RAHMAN LIPU [ashrakrahman.github.io](https://ashrakrahman.github.io)

 +1 438-462-2346  [ashrakrahman@gmail.com](mailto:ashrakrahman@gmail.com)  [linkedin.com/in/ashrakrahman](https://linkedin.com/in/ashrakrahman)  H4P 0C5, Montreal, QC

---

A Passionate Software Engineer searching for a responsible and challenging position which will give me the opportunity to apply my problem-solving skills and knowledge that I developed through my 8+ years of professional experiences.

## Work Experience

---

### **RankWorks – Senior Software Developer**

*Montreal, Quebec | Oct 2022 – Present*

- Designed Rankworks cloud-native microservices platform using **Python, FastAPI, MongoDB, Redis, Kafka, Docker, K8s** etc. Integrated Stripe payment gateway, Single Sign on Module, Real-time Notifications via Kafka & WebSocket, Social Connections module, scheduled social media Posting etc.
- Deployed scalable infrastructure on **Google Cloud Platform** using **GKE, Artifact Registry, GitHub Actions**, and **Cloud Shell**.  [Rankworks Business](#)
- Led front-end development using **React.js, TypeScript**, and **Redux**, implementing scalable architecture, **Sass modules**, BI dashboards and containerized react build with docker for production ready environment.

### **TigerIT Bangladesh Ltd. – Software Engineer**

*Dhaka, Bangladesh | Aug 2020 – Sep 2022*

- Worked on core development of webRTC based video conferencing application (CommChat Meetings) using **Twilio video sdk, Typescript, ReactJs, Redux, MQTT, Node.js, GraphQL** etc.
- Developed meeting room creation module, A/V track create and publish module, A/V preview grid layout module, Screen feed publish module, Ongoing calls modules, Instant join meeting module, Participant list module etc. Integrated react hooks, redux state management, context providers, react testing libraries and mocks etc.  [Commchat Meetings](#)
- Developed an online survey tool from scratch to create online survey forms where the surveyor dynamically creates questionnaires, publishes forms, and collects users' answers from the survey questionnaires.
- Mentored junior developers, conducted code reviews, and managed pull requests to ensure code quality.

### **mPower Social Enterprises Ltd. – Software Engineer**

*Dhaka, Bangladesh | Nov 2018 – Aug 2020*

- Worked on several projects using **Python, Django, Postgresql, Celery, Pandas, Numpy, Javascript** etc. Developed and maintained robust backend services and REST APIs to support mobile applications and frontend platforms for reporting and analytics.
- **BRAC HCMP – Inventory Management System**: Developed requisition workflows, product return handling, stock management, and approval hierarchies.  [BRAC HCMP](#)
- **IFC Agro Advisory Portal**: Integrated farmer data with external **weather station APIs** to generate personalized farming tips.  [IFC](#)
- **SHUROKKHA – Telemedicine Platform**: Enabled veterinary diagnoses, SMS alerts, and report generation for livestock care.  [SHUROKKHA](#)

### **B-Trac Solutions Ltd. (Harriken.com) – Software Developer**

*Dhaka, Bangladesh | Jun 2017 – Oct 2018*

- Developed RESTful APIs for **Harriken's Web, iOS, and Android** platforms using **Laravel and MySQL**.
- Built **Restaurant Management System** and **Bill Verification** tools for **bKash Restaurant Week Campaign**.
- Created **QR-based Jackpot System** to reward users through Harriken's app during promotional campaigns.

## Education

---

**Rajshahi University of Engineering and Technology (RUET)**

Bangladesh | 2012 – 2017

**B.Sc in Computer Science and Engineering (CSE)**

**Medium of Instruction:** English

**CGPA:** 3.3 out of 4.0

**Spoken Languages:** English (Fluent), French (Beginner)

## Technical Skills

---

### Programming Languages:

Python • TypeScript • JavaScript • PHP • C • SQL

### Backend Frameworks:

FastAPI • Django • Node.js • Laravel • CodeIgniter

### Databases & Data Systems:

PostgreSQL • MongoDB • Redis • Kafka • NoSQL • ORM • Celery • Pandas • NumPy

### Frontend Technologies:

React.js • Redux • HTML5 • CSS3 • SASS • Bootstrap • Tailwind CSS • JavaScript (ES6+)

### API & Data Handling:

REST APIs • GraphQL • JSON • WebSocket

### DevOps & Cloud Technologies:

Docker • Kubernetes (GKE) • Git • GitHub Actions • Google Cloud Platform (GCP) • Bash Scripting • Nginx

### Project & Team Collaboration:

Jira • Trello • Asana • Agile/Scrum

### Office Tools:

MS Word • MS Excel • MS PowerPoint

## Research & Others

---

**Publication:** Exploiting Parallelism for Faster Implementation of Bubble Sort Algorithm Using FPGA. *2nd International Conference on Electrical, Computer & Telecommunication Engineering (ICECTE)* 8-10 December 2016, Rajshahi-6204, Bangladesh. **Link** - [ieeexplore.ieee.org/document/7879576/](http://ieeexplore.ieee.org/document/7879576/)

**GitHub Projects:** [github.com/ashrakrahman](https://github.com/ashrakrahman)