# S. M. Faisal Rahman

# Software Engineer

Cambridge, United Kingdom

+4407377872865

in linkedin.com/in/faisal-rahman-88174512a

github.com/Frank-en-stein/

#### Summary

Aspiring software engineer offering 3+ years of professional experience building customer focused web & mobile apps and leading subteams. Excited to work with distributed algorithms & design scalable products hands on. Tech I've worked with:

- Java (Android & J2EE, Spring boot)

- C/C++ (Clang, GCC)

- JS (React, Vue, JQuery, Node, Express)

- Swift (iOS)

- Python (OpenCV, Numpy, Pandas, Keras) - HTML, CSS - Cache (Memcached, Redis)

- PHP (Laravel)

**Industry Experience** 

- **DBMS** (MySQL, Mongo, Oracle, Cassandra) - **Message Queue** (RabbitMQ, Kafka)

- Version control (Git, Gerrit, p4v) - Virtualization (Docker, Vagrant, Virtual Box)

## **Software Development Engineer**

March 2021

Amazon (AWS S3), Cambridge, UK

• Working to sustainably scale S3 Event bus to support a TPS of billions and onboard new use cases.

#### **Full-stack Software Developer**

February 2020 - February 2021

European Bioinformatics Institute (EMBL- EBI), Cambridge, UK

• Worked on Europe PMC (Europe PubMed Central - europepmc.org)

- Took ownership of system wide ORCID integrations (Java, Vue) - Solo implemented article storage microservice (Java, RabbitMQ)

- Solo introduced new article claim feature (Vue, Java)

- Contributed to complete reimplementation of UI (Vue).

- Took over development & maintenance of THOR project (www.ebi.ac.uk/europepmc/thor)

- Introduced smart worker thread scaling in data consumer microservices to work regardless of underlying VM features (Java)

## **Software Engineer**

April 2018 - December 2019

Samsung R&D Institute Bangladesh (SRBD), Dhaka, Bangladesh

• Awarded Icon Engineer Certificate, Achieved SWC Professional Certificate for programming competency

• Social media app - iOS (Swift):

- Took ownership of feed and post modules

- Designed content Feed engine to

- Flexible SDK architecture design for Samsung Cloud interfacing - Optimized Gif player (not present in iOS natively)

- Periodic code reviews & design reviews (100% of codebase)

- App cache design & implementation

- 80% unit test coverage in SDK

- Coded about 30% of the complete codebase

• Artecture (drawing app) - Android (Java, C++):

- Retained a rating 4.3 with 1M+ users

- Designed & implemented Permission Controller module

- Written a custom build system for Native C++ codebase

- Ported legacy code to Android Studio

- Adapted complete legacy GNU C++ codebase for Clang

- Optimized C++ codebase to introduce ARM64 compilation

- Continuous improvement of C++ POSIX thread management

- Developed internal tools for proper dependency updates

# Remote Software Engineer

November 2017 - April 2018

Far-East IT Solutions Limited, Dhaka, Bangladesh

• Flight booking system - Laravel backend (Designed 100% of the product):

- Designed REST API backend following MVC design pattern from - Designed search cache (Redis)

- Docker orchestration (unreleased)

- Designed & deployed full MySQL database

- Bulk SMS/Email message queue

• Flight booking system - ReactJS admin panel (Coded 50% & Released):

- Implemented Client side search & filter

- Integrated payment gateway (BKash)

- Bulk SMS and email dashboard

• Flight booking system - ReactJS user site (Released & handled 30% issues):

- User verification - Landing page

## **Software Engineering Intern**

December 2016 - January 2017

Solution Art Ltd, Dhaka, Bangladesh

• Bangladesh Coast Guard eDocument management system - PHP:

- Requirement Analysis & Proposed system design

- Proposed detailed UX flow & Infrastructure requirements.

#### Education

### **Bachelor of science, Computer Science and Engineering**

2014 - 2018

Military Institute of Science and Technology, Dhaka

• Club affiliations: MIST Robotics Club, MIST Computer Club; increased 30% budget savings automating event management and payment tracking gaining much smoother user experience. OpenCV based image processing for initial screening of receipts.

• Thesis: A proposed transport layer security mechanism for IoT multicast protocol suite and simulated performance comparison