

# S. M. Faisal Rahman

Software Engineer

📍 Cambridge, United Kingdom  
☎ +4407377872865  
✉ smfaisal1648@gmail.com  
in linkedin.com/in/faisal-rahman-88174512a  
🐙 github.com/Frank-en-stein/

## Summary

**Aspiring software engineer** offering *2+ years of professional experience* building customer focused *mobile & web app* and leading sub-teams. Willing to work with distributed algorithms & design scalable products hands on. Tech I've worked with:

- **Java** (Android & J2EE, Spring boot)
- **Swift** (iOS)
- **PHP** (Laravel)
- **DBMS** (MySQL, MongoDB, Oracle)
- **C/C++** (Micro C, Arduino, Boost, Native mobile & Competitive programming)
- **Python** (OpenCV, Numpy, Pandas, Keras)
- **Cache** (Memcached, Redis)
- **JS** (React, Vue, JQuery, Node, Express)
- **HTML, CSS**
- **Version control** (Git, Gerrit, p4v)
- **Virtualization** (Docker, Vagrant, VirtualBox)

## Industry Experience

### Full-stack Software Development Engineer

2020

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

- Working on Europe PMC ([Europe PubMed Central - europepmc.org](http://Europe PubMed Central - europepmc.org))
  - Took ownership of system wide ORCID integrations (Java, Vue)
  - Solo introduced new article claim feature (Vue, Java)
  - Took over development & maintenance of THOR project ([www.ebi.ac.uk/europepmc/thor](http://www.ebi.ac.uk/europepmc/thor))
- Solo implemented article storage microservice (Java, RabbitMQ)
- Contributed to complete reimplement of UI (Vue).
- 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
- In-team mentoring for software competency, software system design & reliability engineering
- **Social media app - iOS (Swift):**
  - Took ownership of feed and post modules
  - Flexible SDK architecture design for Samsung Cloud interfacing
  - Periodic code reviews & design reviews (100% of codebase)
  - 80% unit test coverage in SDK
- Designed content Feed engine to
- Optimized Gif player (not present in iOS natively)
- App cache design & implementation
- Coded about 30% of the complete codebase
- **Arctecture (drawing app) - Android (Java, C++):**
  - Retained a rating 4.3 with 1M+ users
  - Written a custom build system for Native C++ codebase
  - Adapted complete legacy GNU C++ codebase for Clang
  - Continuous improvement of C++ POSIX thread management
- Designed & implemented Permission Controller module
- Ported legacy code to Android Studio
- Optimized C++ codebase to introduce ARM64 compilation
- 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 scratch
  - Designed & deployed full MySQL database
- Designed search cache (Redis)
- Docker orchestration (unreleased)
- Bulk SMS/Email message queue
- **Flight booking system - ReactJS admin panel (Coded 50% & Released):**
  - Implemented Client side search & filter
  - Bulk SMS and email dashboard
- Integrated payment gateway (BKash)
- **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 (key: DTLS for multicast)