

Mohammad Yousuf Minhaj Zia

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EDUCATION

National University of Singapore (NUS)

Aug 18 - Present

- Bachelor of Engineering (Computer Engineering), Hons with minor in Data Engineering (restricted minor)
- Current CAP: 4.53 (Expected First Class Honours) Dean's List 2019/2020 FoE and SoC
- Expected Date of Graduation: May 2022

WORK EXPERIENCE

Software Engineer Part-Time, Glints

May 21 - Present

- Implemented backend business logic for internal product in GraphQL and REST API.
- Architected a Kafka pipeline and stream processor in Scala with FP principles, which aggregates on Postgres change data events and sinks to Elasticsearch bringing down sync frequency from 24h to < 1s.
- Implemented an Elasticsearch indexing solution for offline and online integration.
- Deployed Scala and Kafka Streams application with CI/CD and Kubernetes helm charts.
- Backend and Data Module Code Approver of a product team where I review PRs before being merged to staging and communicate directly with stakeholders to verify requirements.
- Investigated and resolved production OOMs and latency issues in NodeJS, Redis, Postgres services through query optimizations.
- As a scrum member specified stories, backlog tasks and participated in sprints in an automated Jira workflow

Co-founder, NUS Fellowmark

Aug 20 - Present

- Co-founded a web application for schools and universities for distributed documentation peer review.
- Implemented backend business logic in Golang and Postgres which includes authentication, basic CRUD and a fileserver to serve file uploads and downloads.
- Implemented frontend in ReactJS with Material UI.

Co-founder, ZiMS

May 20 - Present

- Founded a suite of open-source video conferencing applications currently for general purpose and education verticles.
- Architected frontend and backend applications with CI/CD, security practices, latency, bandwidth and idempotency.
- Currently deployed by Vitamins in Netherlands to connect mental health professionals with people in need of help.

Intern Software Engineer in Test, Autodesk AutoCAD

Jul 20 - Dec 20

- Migrated 400 test cases from TestComplete to in-house API automation for AutoCAD verticals, ACA and AME, making test execution over 90% faster and leaner reducing test server costs.
- Implemented a VBScript parser in Python to tag GUI operations in approx. 7000 TestComplete test cases and designed analysis metrics to identify suitable candidates for migration.
- Architected and implemented a GUI handler tool using Win32 API, UIAutomation, ObjectARX and .NET which is automation framework and product independent.

Intern Machine Learning, NExT++ Research Center

May 19 - Dec 19

- Designed and tested financial sentiment models on financial news for stock market prediction research back-tested models with algorithmic trading libraries zipline and pyfolio (10% return without transaction costs).
- Trained and tested financial lexicon models, Google BERT and deep learning models using Pytorch.
- Processed and filtered approx. 13 million financial news articles to optimize model performance.

SKILLS

Proficient Scala, GraphQL, Postgres, Kafka, Typescript, Javascript, Go, C, C#, C++, Java, Swagger/OpenAPI, Python, HTML, CSS, React, Docker, NoSQL, CI/CD, Testing Automation, Agile, JIRA, Pytorch, Pandas, Numpy.

Exposure Kubernetes, GCP Compute Engine, AWS EC2, Selenium, Rust, Lua, .NET