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: 4.50 (Expected First Class Honours) Dean's List 2019/2020 FoE and SoC

- Expected Date of Graduation: May 2022

WORK EXPERIENCE

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.

- 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.

PROJECTS

ZiMS ⍟   **Jan 21 - Present**

- An open-source multi-party video conferencing web application using WebRTC for online education.

- Deployed Janus SFU Media Server for scalability and architected a microservices architecture with Typescript React Frontend and Docker containers of Node API and Postgres databases on Netlify and Heroku.

NUS Online Feedback System ▶   **Aug 20 - Present**

- A web application for schools and universities for collaborative documentation peer review integrated with Google Docs implemented using Firebase Cloud Functions and Firestore.

- Implemented backend infrastructure to split and distribute Google Docs between teams by heading with document versions and comments.

ZiMS Mesh ⍟   **May 20 - Present**

- ZiMS for general purpose video conferencing implemented using mesh topology for smaller parties using Firebase Firestore and Hosting.

Neural Network Coprocessor using Xilinx FPGA for ARM   **May 20 - Jul 20**

SKILLS

Proficient C, C#, C++, Java, Python, HTML, CSS, Javascript, Typescript, REST, Node, React, NGINX, Docker, SQL, Postgres, Firebase, NoSQL, CI/CD, GitHub Actions, Testing Automation, TestComplete, Agile, Scrum, JIRA, Pytorch, Pandas, Numpy, Heroku

Exposure GCP Compute Engine, AWS EC2, Selenium, Go, Lua, .NET, Open-source