

Mahan Das

CS Grad student with work experience as a
Full Stack and FIX Protocol Developer(in low-latency trading)
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EDUCATION

The University of Texas at Dallas (GPA: NA)

Fall 2019 - May 2020

Masters in Computer Science(Courses: Analysis of algorithms and Data Structure, Database design, discrete system)

Dallas, Texas

Govt. College of Engineering, Pune(GPA: 3.69/ 4.0)

May 2017

Bachelor's in Technology in Electronics and Telecommunication(Class Rank 15/98)

Pune, India

SKILLS

Languages: C#, Java, Python, MySQL, , C, C++, R, JavaScript, VB.NET, Shell, Perl, Angular, HTML

Web technologies: Angular, HTML 5, Flask, VB.NET, Socket-IO,WebSockets, SOAP, REST, Microservices, TCP/IP Sockets, AWS(EC2)

Scripts/UI/Versioning tools: Shell, Perl, JavaScript, JQuery, D3.js, Git, JIRA, svn

Database and ORM: MySQL, mongoDB, ActiveMQ, Solace, RabbitMQ, ZeroMQ

IDE: Eclipse, Visual Studio, Visual Studio Code, Brackets, IDLE, spyder, pycharm, SSMS, Compass

EXPERIENCE

FinIQ Consulting Pvt. Ltd.

Software Developer/ FIX Developer

June'2017 - July'2019

- **Architected and implemented a push-based MVC** approach for streaming data to client sessions by assigning asynchronous tasks and Lambda expressions to the existing microservices. (Written in C# and Java).
- Migration of our main API from SOAP to a hybrid SOAP+REST based API for backward compatibility and lightweight streaming of data.
- **Reduced 6% of latency** in the transfer of messages when implemented the new Web API on load balancer (built mainly in Java and C#).
- **Implemented TCP/IP sockets for streaming** string objects between FIX engine and WebSockets using microservices in C#.
- **Achieved a speed of 76ms with the new distributed architecture** over the long polling methodology with 1.32 sec latency in production..
- Worked on POC on message brokers (ActiveMQ, ZeroMQ, RabbitMQ) and hardware systems like Solace, for efficiency testing of the system.
- **Improved the efficiency of Monte Carlo on Vanna Volga** pricing from 40 secs to 14 secs by implementing lambda jobs on existing 3D spline for volatility surface value retrieval.

Goldman Sachs

Summer Analyst Internship

May'2016 - July'2016

- **Member of the Platform Solutions team**, to help automate operation divisions tasks.
- **Reduced latency by 60% by automating** the existing architecture of manual archiving of daily commits to the server.
- Designed and developed a front end web page in Angular to upload and execute the java package.

PROJECTS

- 1. OpenChat** • A multilingual chat room on top of Google Cloud Translate API that converts the conversation to users base language
• Using Python with flask with socket-io, with HTML page callbacks in Javascript and JQuery. [Link](#)
- 2. FIX-Dev** • Implemented an Array of architectures in Java for ActiveMQ, HTTPS and Solace connectivity. [Link](#)
- 3. VeniDevice** • Built a device to determine the point of insertion for venipuncture extensively in Python.
• Created on Raspberry Pi2 using IR LED Array, NoIR filter and coded with classification algorithms. [Link](#)
- 4. Architected a distributed system** using mail and python. Passed python files to local node servers via bots listening to mail accounts.
Python files were imported, processed and the result was sent back via mail to master server.

ACTIVITIES AND ACHIEVEMENTS

- Volunteered for **Goldman Sachs Community team works, Bengaluru'16** for planting trees for a sustainable future.
- Department **Rank 15/98** in ECE; First Class with Distinction degree for scoring >75% aggregate
- Volunteered at COEP MUN' 2015, **Head of Volunteers at COEP MUN'16**
- Secured **A1 grade in 5/5 subjects; awarded to top 1/8th of passing candidates** in Class X CBSE Boards.
- **Awarded Scholarship, to pursue a Bachelors** of Science degree, for securing 99+ percentile in High School exam.

CERTIFICATIONS

MongoDB Basics, Language certification(C#, Python, Java)