Ting Yao Fam

Full-time engineer and part-time graduate student based in Singapore. Singaporean.

Email / LinkedIn / GitHub

Technical Skills

- **Data Engineering**: Flink, Hive, Presto, Spark, Hbase, Airflow
- **Databases**: SQL (Clickhouse, Hive, Presto, Redshift, Athena, BigQuery, PostgreSQL); NoSQL(DynamoDB, Hbase)
- **Cloud**: AWS Certified Solutions Architect, Google Cloud Certified Data Engineer
- **DevOps**: Deployment with AWS CF, Serverless Application Model, ECS; CI/CD with AWS CodePipelines, GitHub Actions
- **Languages**: Java, Python, Scala, C; Some experience in R, Node.js, Go, C++;

Professional Experience

FX Systems Data Engineer @ Tencent *(Sep 2021 - Present)*

- Delivered real-time Positions/PnL dashboards that helped traders/risk managers/management with monitoring risks
- Built backend grpc service that serves time-series related data to customer-facing miniprogram in Wechat
- Built batch data pipelines and dashboards for evaulating various hedging strategies, fx pricing strategies
- **Tools used:** Flink, Hive, Spark, Clickhouse, Hbase, Graphana, GRPC
- **Languages used:** Java, Python

Software Engineer (Data) @ Aqilliz *(May 2020 - Aug 2021)*

- Designed, implemented and maintained the company's data infrastructure from scratch
- Built streaming and batch data pipelines that reconile transactions from different data sources and deliver analytics
- **Tools used:** Airflow, Apache Flink, AWS ECS, Kinesis, Athena, Glue, S3, RDS, API Gateway, Lambda, Quicksight
- **Languages used:** Python, Java, SQL, Node.js, Go

Software Engineer (Data) @ HOOQ *(Mar 2019 - May 2020)*

- Rearchitected the data infrastructure from a purely data warehouse (Redshift) to data lake (S3, Redshift Spectrum/Athena, Redshift) design, reducing operating costs by $> 20\%$
- Improved readability, reliability, and flexibility of ETL process by rewriting the legacy ETL processes (Windows Scheduler with Pentaho Data Integration) on Airflow DAGs and Python
- Conducted workshops and mentored junior team members

Senior Associate @ Deloitte *(Mar 2018 - Jan 2019)*

- Reconciled financial transactions across different banks to help identify anti-money laundering, terror financing law breaches

Software Engineer (Data) @ Dentsu Aegis Network *(Aug 2016 - Mar 2018)*

- Developed data pipelines to ingest structured and unstructured data
- Productionized machine learning models used in marketing attribution by rewriting API codebase from R to Python, optimising SQL queries, reducing execution time by $> 10x$

- Architected and deployed auto scalable infrastructure stack on AWS(ECS) and GCP(GKE), reducing monthly costs by 80%, cutting deployment time down to less than 5 minutes (Cloud Deployment/Cloud Formation)

Google Squared Data & Analytics Trainee @ Google *(Jun 2016 - Feb 2017)*

- 1 of 25 graduates chosen from over 300 applicants (2016 cohort) in Google's Squared Data & Analytics Program (a collaboration with Singapore's IMDA) undertaking weeks of on-site training at Google in Web Analytics, Predictive & Text Analytics, R, BigQuery and Google Analytics.

Education

Georgia Institute of Technology *(Aug 2020 - Present)*

- Candidate for MS in Computer Science
- Specialization: Computing Systems

Nanyang Technological University - *Singapore (Aug 2012- Jun 2016)*

- BE in Electrical and Electronic Engineering
- Specialization: Info-communication Engineering
- 2nd Class Upper Honours (Distinction)

KTH Royal Institute of Technology - *Stockholm, Sweden (Aug 2014 – Jan 2015)*

- Student Exchange Programme at School of Information and Communication Technology

Awards

Certificate of Distinction – *NTU (Jun 2015)*

- Awarded for excellent performance during internship

President Research Scholar with Merit – *NTU (Jun 2014)*

- Awarded for undergraduate research work in "Optimisation of Photon Detection Systems" with DSO National Laboratories