

Ang Boon Chong Joseph

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EXPERIENCE

Senior Data Engineer

Apr 2024 – Present

Grab

- Key maintainer and developer for Apache Airflow Platform as a Service for Grab. Supported scheduling needs on Airflow for over 80 Data Science and Analytics teams. Managed Airflow deployment via Kubernetes Operator
- Contributed to Apache Airflow to greatly improve triggerer performance (Pull Request #40487)
- Contributed to setting up OIDC authentication for various applications in Data Engineering, including Airflow, Superset and Vault. Working towards improving better security within Data Engineering.
- Data Engineer for Security Data Lake Project. Wrote ETL pipelines with Spark and Airflow to ingest and transform raw various log types to data lake.
- Maintainer to the Data Engineering Team's infrastructure on Kubernetes Clusters. Encouraged and enabled the team to improve resiliency for our applications via modification to Helm Charts
- Working on unified entry point for all Spark jobs (EMR, Databricks, Spark on Kubernetes). Leading the Spark on Kubernetes implementation

Site Reliability Engineer

Dec 2022 – Mar 2024

Grab

- Key maintainer and developer for the Apache Airflow Platform as a Service (PaaS) for whole of Grab. Providing over 80 Data Science and Analytics teams with a highly reliable scheduling platform for their business critical ETL, Machine Learning and Analytics pipelines.
- Successfully implemented and rolled out KubernetesExecutors on the Airflow Platform, improving the scalability and cost-efficiency of the platform.
- Initiated and completed set up of a Platform Onboarding and Metadata Kubernetes Operator to provide a central unified tool Platforms to create necessary cloud and Kubernetes resources for their users.

Software Developer (Common Library)

Aug 2022 – Dec 2022

Accenture

- Spearheaded Rollback Testing for a distributed microservice architecture. Wrote codes in ASP.NET MVC Framework. Developed operation guidelines for rollback scenarios to be used in production environment.
- Collaborate on Confluent Cloud Kafka producer and consumer common library. Implemented schema registry secrets to microservices through the use of helm charts and secrets deployed in Kubernetes cluster. Responsible for schema deployment to several development environments.

Business & Integration Architecture Analyst

Aug 2021 – Dec 2022

Accenture

- Wrote API and UI Scripts in Apache Jmeter, Element Typescript and Flood. Conduct performance load testing on a distributed cloud architecture system. Analyze results and worked with internal team to improve system to meet SLAs.
- Perform scalability test to determine optimal resource allocation for Kubernetes pods.
- Conduct Resiliency Testing on cloud-on premise hybrid distributed system
- Troubleshoot and liaise with business analysts and developers to resolve various issues involving Confluent Cloud Kafka, Kubernetes and code etc.

Process Engineer

Aug 2020 – Aug 2021

ExxonMobil

- Ensured smooth and optimized operation of the Vacuum Distillation Unit (VDU) through conducting process monitoring, data analysis and site surveys.
- Troubleshoot on various process issues and implement solutions to reduce risks and impacts
- Lead and coordinate margin improvement projects which were key to maximizing vacuum gas oil recovery, improving unit health and product upgrading.

EDUCATION & CERTIFICATIONS

Georgia Institute of Technology

Online Master of Science in Computer Science (OMSCS)

- CS 6200: Introduction to Operating Systems (Grade: A)
- CS 7641: Machine Learning (Grade: A)
- CS 6250: Computer Networks (In Progress)

Jan 2024 – Present
Ongoing

National University of Singapore

Bachelor of Engineering (Chemical Engineering) with Honours (Highest Distinction)

- Dean's List AY2019/2020 Semester 2
- NASA Exchange Scholarship AY2018/2019 Semester 2

Aug 2016 – Jun 2020
CAP: 4.56/5.00

Certified Kubernetes Application Developer

[Verify Credentials Here](#)

AWS Certified Solutions Architect – Associate

[Verify Credentials Here](#)

Microsoft Certified: Azure Fundamentals

[Verify Credentials Here](#)

PROJECT

Independent Software Development Project | *Splitz*

May 2017 – Aug 2017

- Designed and developed an Android Application with a teammate within a short time frame of 3 months
- Actively did independent learning of Java and Android Studios from scratch, in order to develop the application
- Attained the Highest Achievement Level which was only awarded to the top 37 of 156 participating teams

COMPETITIONS

Grab AI for SEA Challenge | *Prediction of Travel Demands Using Historical Data*

Jun 2019 – Jul 2019

- Utilized Keras in Python to build a Long Short-Term Memory (LSTM) models to predict future travel demand
- Utilized Multiprocessing to improve run-time of code
- Final LSTM model achieves a Root Mean Square Error of 0.019

Shopee Code League 2020 | *Data Analytics Competition*

Jun 2020 - Aug 2020

- Collaborated in team of 4 to tackle various data science and analytics problems using Python
- Used FastAI to build a EfficientNet model for image classification, achieving a 81% accuracy in prediction after experimenting on numerous image transformations and resizing methods

ADDITIONAL INFORMATION

Technical Skills: Kubernetes, Amazon Web Services, Apache Airflow, ArgoCD, Azure, Apache Jmeter, Tricentis Flood

Languages: Go, Terraform, C#, Java, Python, Excel VBA, SQL, Azure Kusto Query Language

Data Analysis Tools: Scikit-learn, NumPy, Pandas, JMP, MATLAB