Zhi Hao Chang

R&D SOFTWARE ENGINEER - AMARIS.AI PTE LTD

Central

- Email me on Indeed: http://www.indeed.com/r/Zhi-Hao-Chang/c3a2b640c1518146

Interest in large-scale architectures & API/message-driven infrastructure • Seeking to strengthen my ASP.NET skills, OOP design skills & design pattern skills for modern Web APIs • Open to opportunity in the cloud computing world such as serverless Azure functions, Azure DevOps, container orchestration, Azure Service Fabric, CI/CD in VSTS etc • Open to opportunity in the modern Big Data world such as building large-scale multiple reporting models (ElasticSearch, LogStash, Kibana, Neo4J, Cassandra, CockroachDB etc) over EventSourcing.

Work Experience

AI DATA ENGINEER

AMARIS.AI PTE LTD - Singapore

September 2018 to Present

Develop solutions that are designed to be resilient and self-healing. These solutions are based off stateful micro-services, event-driven architecture and CQRS reporting/read models. It breaks the traditional monolithic scheduling & orchestration architecture, creating an AI & RPA automation platform that is truly in real time and easily extensible.

SOFTWARE ENGINEER

ASIA FUSION TECHNOLOGY LTD - Singapore

September 2017 to September 2018

Singapore

Joined a scrum team in building scalable stateful web application that emphasizes single source of truth, modularity & eventual consistency in mind. Technologies used include SPA (Angular), novel state management model (Redux & NgRx store), event sourced systems, micro-services (ASP.Net Core), distributed virtual actor model (A true real-time technology adopted in Halo 4&5's gaming services), CQRS design pattern and etc.

Education

MEng in computing

SWINBURNE UNIVERSITY

June 2014 to May 2017

Skills

ASP.NET (2 years), .NET (2 years), C# (2 years)

Links

https://www.linkedin.com/in/zhi-hao-chang-24077094

Publications

Distributed video transcoding on a heterogeneous computing platform

https://ieeexplore.ieee.org/document/7803998

January 2017

Supervised by Prof M. L. Dennis Wong and have successfully realized real-time distributed video transcoding across heterogeneous computing systems. The proposed system emphasizes throughput of video data aggregation which involves the continuous input video streams and outcomes of transcoded video streams that are accessible on-the-fly in contrast to batch-oriented approaches such as the MapReduce framework, where output latencies can be significant.

• Published in: IEEE APCCAS 2016, Jeju Island, Korea, October, 2016. pp. 444-447.
• Thesis: https://researchbank.swinburne.edu.au/items/3dc42b2c-9e11-495c-ac5a-9323c7072509/1/

Additional Information

Web Development:
ASP.NET Core • .NET Standard • MongoDB • ArangoDB • SQL Server • Angular • Redux & NgRx store • Service Discovery • Reverse Proxy • Git

Distributed Systems & Big Data Computing:
Microsoft Orleans 2.0 (Proficient in Actor Persistence, Observers, Reminders/Scheduling, Orleans ACID Transactions) • Stateful & Stateless Microservices • CQRS/Event Sourcing • Distributed Sagas, SignalR • RabbitMQ • Object-based Storages • Docker • Apache Storm • Hadoop

CODING EXPERIENCES
C# • LINQ • DI • IoC • TypeScript • Java • Python • OpenCV • Matlab • VHDL • Assembly • PLC • LATEX

GENERIC SKILLS
Interpersonal Skills • Team Work

SPOKEN &
WRITTEN
Native fluency:
English, Chinese, Malay
Reading fluency:
English, Chinese, Malay