Eugene (Yujing) Wang

416-953-5261 | eugene.r.w.12@gmail.com | in/eugland | eugland.github.io | orcid/0000-0003-2219-8946

Experience

Software Engineer

September 2022 – September 2024

Microsoft

Seattle, WA

- Built a self-scaling developer platform in Azure using C#, Python, and PowerShell that dynamically responded to workload spikes, enabling zero-downtime job execution and seamless global developer experience.
- Designed idle-handling logic with a 2-minute anticipation buffer before VM shutdowns, reducing resource churn and enabling faster job pickup without unnecessary restarts.
- Designed fault-tolerant, blue-green delivery pipelines using Jenkins and GitHub Actions, boosting release confidence and observability.
- Enhanced system security and monitoring by replacing PAT-based authentication with certificate-based OAuth, and by building real-time, time-series anomaly dashboards using Kusto for Azure Service Bus activity tracking.
- Created a smart PR bot using OPENAI CODEX to auto-generate PR descriptions and unit tests with AI.
- Coordinated global incident response during on-call shifts, navigated critical outages including the infamous CrowdStrike meltdown, and brought services back online under fire.

Senior Software Engineer

January 2022 – September 2022

Capital One

Toronto, ON

- Led a team to implement the credit limit feature for the SecuredCard product, leveraging AWS cloud services for scalable and robust Java application deployment.
- Designed a publisher-subscriber architecture to handle credit limit increase applications, replacing the previous filed-based solution.
- Outlined customer scenarios in cucumber tests, and leveraged Jenkins and GitHub CI to maintain system quality.
- Architected the division of the legacy monolithic application into lambda microservices, and strategically merged some to enhance service latency and optimize billing.
- Devised and periodically tested an AWS multi-geo-region failover plan as a safeguard against data center outages, achieving failover speeds of less than 500ms.

Senior Software Developer

August 2021 – January 2022

Ontario Health

Toronto. ON

- Led a team of 3 developers through a full cycle of design, develop, deliver fullstack Angular NodeJS development.
- Incorporated NestJS, Bootstrap, and Storybooks among other utility libraries to cut time by half to 3 months.
- Enforced accessibility compliance for the app on all major browser platforms and screen sizes.
- Continuously supported the lab app amid COVID-19 variants surges to ensure tests are counted and reported.

RESEARCH PUBLICATIONS

Y. Wang, Q. Bao "Adapting an Container Infrastructure for Autonomous Vehicle", IEEE CCWC & * [56 citations] Using signal latency as a criterion to evaluate containers for adaption in a mixed critical system. 2020

Y. Wang, D. Ma "A Process in Architecting Microservices with Docker, Kubernetes, and Istio" [7] * [7] citation Performed analysis on mesh networks orchestration for applications of various purposes and sizes. 2019

SKILLS AND CERTIFICATIONS

Certificate Microsoft AI developer, Microsoft Azure Admin, Amazon AWS solutions developer, Google Cloud Developer, Google Kubernetes Architect:10622413 Languages: Java, Python, C++, C#, Kotlin, HTML/CSS, Kusto

Frameworks: .Net, Android, Tensorflow, Angular, Node.js, Flask, Pytorch, JUnit, Spring Boot

Devops: Azure, AWS, GCP, Kubernetes, Terraform, MongoDB, Cuda, Git, Docker

Interests: Hiking, Paddling

EDUCATION AND RESEARCH

University of Waterloo

Waterloo, ON

Sep. 2021 - Aug. 2022

Master of Engineering, Computer Engineering Bachelor of Science, Honours Physics

Sept. 2016 - Aug. 2021