Jeremy Fong San Pin

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SUMMARY

Senior Developer with 5+ years of experience in Software Engineering and Platform Development, specializing in cloud infrastructure, workflow automation, and large-scale distributed systems for Cloud RAN. Proven record of improving integration and testing efficiency via automation, enhancing developer experience and delivering production-grade solutions in Kubernetes/Openshift (OCP) environments. Pursuing opportunities **in the self-driving and AI/robotics industry as a Software, Cloud Infrastructure or Site Reliability Engineer,** building reliable and innovative systems at scale.

WORK EXPERIENCE

Sep 2024 - Present **Ericsson Canada | Ottawa**
Senior Cloud RAN Software Developer JS6

- **Drove optimization of end-to-end DevOps workflows** in both cloud and embedded by:
  - Automation: Built Ansible playbooks and Expect scripts to automate remote radio operations
  - Monitoring: Deployed **Prometheus, Grafana, Fluent Bit, and Loki** to centralize logging and metrics
  - CI/CD pipelines: Leveraged Jenkins and Spinnaker to deliver automated CI/CD workflows
  - Manifest management: Configured and owned customer-facing production Helm charts of vDU
  - IaC: Built scalable distributed data pipeline with Terraform using AWS Glue for automated ETL processing and API driven notification service with AWS S3, API Gateway and Lambda
- Led implementation of **automated test frameworks** for radio fault injections, now widely adopted
- **Drove self-initiated cross-functional (researcher-engineer) collaboration** to integrate CPU resource management research using NRI plugins into cloud platforms (OCP, CNIS) with production rollout
- **Led 3 self-directed innovation initiatives**, presenting demos to audiences of several hundred:
  - Team Lyra (team of 10): Developed AI/LLM frameworks leveraging Retrieval Augmented Generation (RAG) and Model Context Protocol (MCP) for large-scale retrieval and testing automation
  - Log Monitoring (team of 4): Transitioned our legacy system to cloud-based logging
  - Stability Lab (team of 3): Created a CLI-based UI to help developers test E2E and soak code
- Inventor on **two patents**: one granted (AI/ML Enhanced Energy Efficiency) and one pending (TR Analyzer)
- Awarded **Key Contributor** for leading automation, cross-team collaboration, and self-initiated projects

May 2022 - Sep 2024 **Ericsson Canada | Ottawa**
Cloud RAN Software Developer JS5

- Served as the go-to expert for Helm Chart implementation leading **4 key customer requested** projects (global, FDD/TDD, unit test, network type) supporting over 20 microservices, 7 teams
- Tested and integrated Cloud RAN vDU deployments using Helm, Kubernetes (OpenShift), Netconf, and shell automation, executing hundreds of hours of rigorous validation
- Developed **inter-service communication for Cloud RAN Baseband/RDM using grpc, C++ & Go**
- Contributed to 3 AI projects: AI for Cell Shaping, Energy Efficiency, GenAI/ChatGPT
- Conducted several live virtual demonstrations to audiences of hundreds of participants

Aug 2020 - Oct 2022 **Wink & City Streats Startups | Montreal**
Founder

- Created & deployed a distributed geolocation API using GraphQL and Node JS
- Founded and Bootstrapped City Streats which was acquired by Wink Messenger

2016 - 2019 **Concordia SAE Formula Electric | Montreal**
Team Captain & Founder

- Converted combustion system into electric and created school's first prototype electric car
- Designed, analyzed, manufactured and tested entire chassis for final year project (placed 1st)

SELF-DRIVING EXPERIENCE

Jan 2020 - May 2020 **Insight Bootcamp | San Francisco**
Artificial Intelligence Fellow

- Built and trained **RL agents for autonomous driving tasks** using the **Carla self-driving simulator**
- Optimized model training pipelines through curriculum learning, improving policy performance by ~20% across benchmark driving scenarios
- Scaled **distributed RL training on AWS EC2**, and hands-on experience using **AWS SageMaker**
- Applied core ML disciplines in CV and RL to real-world self-driving systems

Apr 2019 - June 2019 **Specialization | Coursera**
Self-Driving Car Complete Specialization (96 hours)

PERSONAL PROJECTS

Built distributed data and services platform on Proxmox home lab:

- N8n workflow automation as a k3s application with **HA proxy, Traefik, FluxCD, SOPS, Redis and Postgres**
- Provisioned all VMs using IaC with Terraform and Packer

Developed multiple custom mobile applications (budget, fridge, chatbot, space dots)

Algorithmic Trading Bot for automatic stock trading using Oanda's api and machine learning

EDUCATION

2021 - 2025 **Master of Science - University of Texas at Austin**
Data Science

2015 - 2019 **Bachelor of Engineering - Concordia University**
Systems & Mechatronics
Awarded: Richard M.H. Cheng Design Award

2010 - 2014 **Bachelor of Commerce - John Molson School of Business**
Marketing & Finance

SKILL PROFILE

Bilingual: English (Native), French (Native), Mauritian Creole (Native)

Programming Languages: Python, Go, Bash, C++, Typescript, Dart

Cloud: Kubernetes, Helm, Docker, AWS, Loki, Grafana, Prometheus, Ansible, Jenkins, Terraform, FluxCD

Software/AI: Linux, gRPC, Postgres, Redis, Networks, Agile, Bazel, Pytorch, LLM, RAG, MCP