# Ping Chuan Tai (Morris)



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morristai.github.io



GitHub



LinkedIn

#### **EXPERIENCE**

#### **Trend Micro**

# Sr. Software Developer

Ottawa, Canada 08/2022 - Present

- Develop an OLTP + OLAP search data-lake using CosmosDB and Azure data explorer for the XDR platform. Support multitenancy and high throughput with a lead-follower architecture.
- Develop a cross-cloud ETL pipeline with Databricks and multipurpose serverless functions.
- Enhance Apache Flink streaming pipeline for model matching and filter rules on AWS EMR.
- Conduct research and integrate a Kubernetes cluster security solution for the XDR platform using Falco and eBPF/Kernel Module. Run the solution as a privileged container in a daemonset.
- Dedicate to Rust lang and share the knowledge with the team through various POC cases.

# **Software Developer**

Taipei, Taiwan 03/2021 - 07/2022

- Develop an email and identity detection streaming platform using Kafka, Databricks, and Airflow.
- Migrate Spring Boot microservices from VM-based/Ansible to Kubernetes/Helm.
- Implement Loki and Tempo for tracing and logging to enhance the platform's observability.
- DevOps with Prometheus, Grafana, and Azure Alert Manager for monitoring and alert-driven actions.
- Implement services that use JNI to call a C++ engine to parse log metadata.

#### Intel

# Intern. Software Engineer (full-time)

Taipei, Taiwan 08/2019 – 09/2020

- Assist the team in debugging graphics drivers using WinDbg and memory dump.
- Develop a dashboard that displays data related to our driver issues using Flask and Plotly.
- Write a parser tool that can extract the Panel EDID and other information produced by driver.
- Study the graphics source code in User / Kernel Mode, understand how SSE/AVX SIMD works

#### **EDUCATION**

National Changhua University of Education

09/2016 to 06/2020

**Bachelor of Management Information System** 

#### PERSONAL PROJECT

Apache / Rust

## Apache - OpenDAL Contrubutor

April 2023 to Present

Contribute to Rust core library, help implement various services and layers.

PRs: https://github.com/apache/incubator-opendal/pulls?q=is%3Apr+author%3Amorristai

Cathay / Microsoft

### Big Data Competition (Championship) media

Sep 2016 to Jan 2017

As the main analyst and leader of the team, I analyzed insurance data and built predictive
models based on supervised learning and stacking model. Through detailed research, we
discovered the relationship between insurance and cancer.

# **SKILLS**

- Programming Languages: Multilingual (not limited to any specific language), especially
  experienced in Rust, Python, and comfortable with Go, Java, C, and C++ (in random order).
- DevOps: Experienced in Terraform, Ansible, Airflow, Kubernetes, Helm, Grafana, and Prometheus.
- System Programming: Experienced in Unix-like OSes, Container/Kubernetes ecosystem, and Web Assembly. Understand the general architecture of cloud systems.
- Rust: Familiar with Cargo, understand procedural macros, Rust asynchronous runtimes, and unsafe usage. Contributed to Rust repositories and participate in the community in my free time.