# Hsieh Chia Yang (謝家洋)

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9+ years of development experience in semiconductor factory. Developed FAB internal web systems and reports with user-centered design. Currently working as a full-stack engineer in Micron Data Science team. A good team player and passionate about learning new technologies and skills.

## **Work Experience**

Micron, Quality Engineering, Data Science Engineer 2020 Mar - Present

Typescript (Angular) / Python / SQL / Linux / Git / MQTT

- Lead functional team to build web systems to automate manufacturing data verification and speed-up fab test flow, which saves 200+ hours of workload per week.
- Lead team members take over and maintain a legacy web system that has over 300 users used for daily work.
- Built REST API using Python flask that served data to the front-end web.
- Used MQTT protocol for data subscription to make web data updated passively in real-time.
- Provided Defect Per Million data for each DRAM products for quality improvement.
- Generated assembly yield reports that save daily routine time 15 min. for early reaction on issues.

Micron, Product Integration Engineering, Data Analysis Engineer 2017 Dec - 2020 Mar

C# / Perl / SQL / Linux

- Partner with a developer to build an internal yield analysis system using C# and Perl for product yield improvement and saved weekly workload over 1,000 hours.
- Built data system on Linux server with design pattern concept.
- Developed auto detection tool to detect if new test program data is out of baseline, which helped to avoid 95% low yield issue caused by test program.
- Built daily system health reports and auto-recovery functions to increase 20% of system stability.
- Built FAB yield reports using Perl and HTML to summarize daily yield status for FAB daily KPI monitor.
- Cross departmental cooperation to calculate accurate weekly yield settle accounts data that related to FAB's profit.
- Migrated Inotera legacy system to Micron system.

Inotera, Product Engineering, Advanced Methodology Development Senior Engineer 2013 Apr - 2017 Dec

Perl / SQL / Linux

- Developed 70+ data parser and loaders using Perl to extract and integrate useful data from different databases for the data source of yield analysis system.
- Maintained ship system with huge data processes in real-time by system loading balance.
- Planed and implemented the retention mechanism of wafer data for RMA data restored.

## **Side Projects**

**PTT Notifier** - Python / Linux / LINE Notify

Send interesting topics/articles through LINE Notify by extracting PTT web data

Athletic training system - Angular / Python / Linux / GCP / MYSQL

Partner with two developers and a gym coach to build a web system that can analyze athlete's muscular power data and recommend the best training method.

## **Skills**

Programming: Python | Perl | Typescript

Web Development: Angular | Bootstrap | HTML5 | CSS | Apache ECharts | D3.js

Development Skills/Knowledge: RESTful API | MQTT | Git | SQL | Design pattern

**Development Environment:** Linux (RHEL) | Windows

#### Education

Master of Science, Computer Science & Information Engineering

National Cheng Kung University, 2009/09 ~ 2013/01

Bachelor of Science, Computer Science & Information Engineering

Tatung University, 2005/09 ~ 2009/09