

SUMMARY

- 10+ years across IIoT device-side systems, backend/cloud services, embedded Linux, and internal IT infrastructure.
- End-to-end architecture owner for telemetry pipelines, RBAC governance, factory data workflows, and production deployment.
- Bridges OT/equipment ambiguity into stable, maintainable systems for real manufacturing operations.

IMPACT SIGNALS

- 100+ industrial machines across multi-site deployment contexts; 5M+ telemetry records/day design target.
- 99.9% service uptime target with heartbeat monitoring, offline recovery, QoS-aware retry, and deduplication.
- Unified equipment telemetry, reporting, RBAC, audit trails, and remote operation workflows into production platforms.

CORE SKILLS

- Backend/Platform: Python, Flask, REST APIs, SQLAlchemy, JWT/session auth, RBAC, audit logging.
- Data/Telemetry: MySQL, Redis, MQTT, RabbitMQ, Pandas, NumPy, reporting APIs, large dataset workflows.
- Infrastructure: Docker Compose, GitLab CI/CD, Nginx, Gunicorn, Linux, systemd, KVM, Google Cloud Engine, OpenStack.
- Operations: monitoring, release packaging, offline deployment, troubleshooting, embedded Linux, Yocto.

SELECTED PLATFORM WORK

- Industrial Equipment Data Platform: architecture, telemetry ingestion, RBAC, dashboards, reports, Linux deployment.
- Wafer Test Equipment Platform: recipe/wafer map workflows, remote access, parsers, state models, field-support tooling.
- Manufacturing Analytics Platform: diagnostic search, statistics pipelines, exports, dashboards, recurring reports.

EXPERIENCE

Raytrex Technologies Co., Ltd. | Deputy Manager | Sep 2021 - Present

- Technical owner for factory software platforms, equipment data workflows, analytics/reporting, and deployment architecture.
- Leads architecture decisions, implementation planning, stakeholder coordination, production reliability, and IT operations.

Bovia Co., Ltd. | R&D Engineer | 2015 - Sep 2021

- Built device-side/cloud-side web services, RabbitMQ bridges, embedded Linux packages, monitoring, and release tooling.

Industrial Technology Research Institute | Software Developer | 2014 - 2016

Pervasive Computing Lab | Research and Teaching Assistant | 2012 - 2016

EDUCATION

M.Sc. Computer Science & Information Engineering, Chung Hua University, 2014 | B.Sc. CSIE, Yuanpei University, 2012

Ph.D. coursework/research in Engineering Science, 2014-2016; left to fulfill R&D alternative service and join startup team.