

Christopher Cai

CO-FOUNDER AND CTO OF A SINGAPORE ENGINEERING FIRM

me@shokkuweibu.com · linkedin.com/in/christophercai · Singapore, GMT+8

I co-founded Intrasys in 2011 and have led every technology function since — infrastructure, applications, cybersecurity and operations. I set the technology strategy and stay accountable for what it delivers — the cloud foundations, the security baseline, the applications on top and the firmware in the field. I own the budget and the vendor contracts behind all of it, and I do this for Singapore Government agencies in healthcare and defence, and for regulated enterprise clients, where uptime and data sovereignty are not negotiable. I spend as much time translating technical roadmaps for non-technical stakeholders as I do building the teams that deliver them.

EXPERIENCE

Co-Founder & Chief Technology Officer

Jan 2011 — Present

Intrasys (Pte.) Ltd — Singapore

STRATEGIC LEADERSHIP & DIGITAL TRANSFORMATION

Co-founded the company, lead all technology functions, and drove a multi-year digital transformation to cloud-first architectures.

INFRASTRUCTURE, CLOUD & CYBERSECURITY

Own the full infrastructure stack; directed Azure governance across 10 subscriptions and 307+ resources; embedded data protection and data sovereignty.

APPLICATIONS, INFORMATION SYSTEMS & DELIVERY

Managed the end-to-end SDLC across RFID network systems, IoT gateways and operational automation platforms.

TEAM LEADERSHIP, BUDGET & VENDOR MANAGEMENT

Lead and mentor a multi-disciplinary team of engineers and IT specialists; own IT budgets, procurement and vendor contracts.

Technical Lead — AI Strokes

Jan — Dec 2022

National University of Singapore (concurrent)

DELIVERY

Led an AI/ML stroke-writing instruction platform from research into the classroom, piloted at Northshore Primary School in 2022.

SELECTED WORK

Prism — prism.intrasys.ai

RFID readers and cameras produce signals that never reach the people running the floor.

A sensor-fusion platform that streams those signals into visual workflows, so an operation can be watched as it happens rather than reconstructed afterwards.

Presto — presto.intrasys.ai

A web app cannot reach a label or RFID printer without a driver and a print dialog in the way.

A print fabric: one small native service that prints from the browser to label and RFID printers over a secure local connection, with neither.

Pulse — pulse.intrasys.ai

Nobody can say who is around today or what the team is actually working on right now.

Ordered per-person priorities, live presence and one real-time dashboard, on web and mobile, with share links for an office screen and no login.

Japan Post Warehouse Control System

Every stock movement is reconciled against the system of record, so equipment, inventory and host never drift out of agreement.

Real-time control layer between the warehouse floor and the host WMS, binding Mitsubishi PLCs, SICK machine vision and conveyor motor to Toshiba WMS over a strict-timing MQTT backplane.

AI Strokes — Technical Lead, National University of Singapore, 2022

A research-to-classroom AI/ML project for Chinese-language stroke-writing instruction, aligned to the Singapore MOE primary-school syllabus.

I led delivery of an iPad application for students and a real-time companion web app for teachers in React.js, streaming each student's stroke-by-stroke writing live for in-classroom observation.

WHAT I OWN

IT Strategy & Governance

I set the technology roadmap against the business strategy, the growth plan and what operations can actually absorb. I own the IT budget, procurement and lifecycle planning, and I negotiate the vendor contracts behind them.

Cloud & Infrastructure

On-premises and cloud, network, endpoint and AV — for our own operations and for what we deploy to clients. Azure governance across 10 subscriptions, AWS platform architecture, and operations standardised on ITIL-aligned practice.

Cybersecurity & Data Protection

Data sovereignty is the first constraint on a design, not a review step at the end of one. The secure device baseline is mine: Azure AD join, MDM enrolment, USB blocking, encryption and patch compliance.

EDUCATION

Bachelor of Computing (Information Systems)	National University of Singapore	2008 — 2011
Diploma in Information Technology (Game Development)	Nanyang Polytechnic	2003 — 2006

TECHNICAL ENVIRONMENT

CLOUD & INFRASTRUCTURE

Microsoft Azure, Amazon Web Services, Cloudflare, Neon, Windows Server, Linux, Ubiquiti UniFi

SECURITY & ENDPOINT

Bitdefender GravityZone, Azure AD, ManageEngine UEM / Endpoint Central, MDM and device compliance, data-protection frameworks

APPLICATIONS & DELIVERY

Python, FastAPI, C++, Rust, React, PowerShell, GitHub, GitLab, Resend, Twilio, EMQX, Agile–Waterfall hybrid SDLC

HARDWARE & FABRICATION

Autodesk Fusion, Bambu Studio

SPECIALIST DOMAINS

Espressif ESP32, STMicroelectronics STM32, RFID and IoT systems, AV and sensor integration, AI/ML in education

LANGUAGES

English	Native / Bilingual
Mandarin Chinese	Native / Bilingual
Japanese	Elementary
