# JOHN WONG

## SENIOR SOFTWARE ENGINEER | ENTERPRISE SYSTEMS, AUTOMATION & CLOUD

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## PROFESSIONAL SUMMARY

Software engineer with 5+ years of hands-on delivery across enterprise applications, fintech and cloud platforms. Owns requirements, architecture, implementation and production support across React, .NET, TypeScript and AWS/Azure. Led a three-person engineering team, built payment infrastructure processing over US$1M per month and delivered finance and operations systems. Current work covers browser RPA and request-driven workflow orchestration moving from feasibility into planned project delivery.

## CORE SKILLS

**Languages & Backend:** C#, .NET, TypeScript, JavaScript, Node.js, NestJS, Java, Go, SQL
**Data & Integration:** PostgreSQL, MySQL, TypeORM, REST APIs, microservices, webhooks, asynchronous processing
**Cloud & DevOps:** Azure, AWS, Docker, Kubernetes, GitHub Actions, CI/CD, Pulumi, Terraform
**Testing & Engineering:** Vitest, Playwright, unit testing, end-to-end testing, Git, SDLC, production support
**Frontend:** React, Angular, Next.js, Microfrontends, Syncfusion
**Fintech & Security:** 3-D Secure, Sumsub eKYC, OIDC/DID, JWT, RBAC, audit logging, secure API integration
**Automation & Workflow:** Puppeteer, Playwright, UiPath evaluation, TypeScript RPA, VS Code extensions, orchestration, LLM OCR

## WORK EXPERIENCE

### Software Engineer | Gammon Construction Limited **Nov 2024 - Present**

*Hong Kong | Enterprise applications, financial workflows and Operations automation*

- Own end-to-end delivery of enterprise applications across React, .NET/C# and Azure, working with operational stakeholders on requirements, solution design, implementation, testing, deployment and production support.
- Architected the Worksmart microfrontend shell and runtime lifecycle across 5+ sub-applications, enabling independent releases and reducing deployment downtime by 50% (about 2 minutes to 1 minute).
- Built the Forecast module with reusable components, Vitest unit tests and Playwright end-to-end coverage for critical workflows; supported releases through CI/CD, rollback processes and Sentry/Dynatrace monitoring.
- Delivered an Invoice Matching Module that reduced manual finance processing by approximately 30%, and contributed to logistics and progress-monitoring systems used by operational teams.
- Advanced two feasibility POCs into planned projects: JD Edwards browser RPA and eForm request orchestration. Defined integration, validation and human review boundaries with operational stakeholders.
- Compared UiPath with Puppeteer and Playwright for web-based JD Edwards workflows; defined a source-controlled TypeScript RPA approach for the upcoming implementation.
- Built a VS Code extension that visualises code-defined workflows in an n8n-style graph and an orchestrator that turns a user request into an eForm automation flow; project delivery is being prepared.

### Founder & Full-Stack Engineer | Pulse Nova Inno Tech Limited **2024 - Present**

*Hong Kong | Independent client delivery since 2024; company incorporated Jun 2026*

**Factory Management Platform**

- Designed and built a multi-tenant manufacturing platform spanning purchase orders, shipment, invoicing and forecasting for a factory workflow of approximately 200 invoices per day, with RBAC and tenant isolation.
- Owned discovery, architecture, NestJS/PostgreSQL implementation and AWS/Cloudflare deployment design; added AI-assisted document extraction with human review to reduce manual errors and paperwork.

**Sing Yin Tong Clinic Platform**

- Delivered a three-branch operational platform supporting about 2,638 monthly bookings and approximately 3,100 WhatsApp notifications, including stored-value transactions, cross-branch history, daily closing summaries and expense approval controls.
- Redesigned the PostgreSQL data model and imported approximately 300,000 historical medical-record rows through staged one-way synchronisation with validation of migrated balances and transactions.
- Built asynchronous document-processing workflows using AWS S3/Lambda, PostgreSQL, webhooks, retries and human validation, while isolating resource-intensive workloads from the core API.

**Senior Software Engineer | LookCard Limited** **Jan 2023 - Nov 2024**

*Hong Kong | Fintech, payments and identity*

- Led a 3-person engineering team with responsibility for architecture, technical trade-offs, integration delivery and code-level problem solving for a white-label fintech and Web3 platform.
- Designed and deployed AWS-based wallet and transaction infrastructure using Step Functions, API Gateway, Lambda and RDS, supporting payment and wallet processing above US$1M per month.
- Integrated Sumsub eKYC with verified callbacks and status synchronisation, and implemented 3-D Secure payment flows; reduced verification turnaround from 24 hours to 15 minutes.
- Implemented DID-based OIDC login, RBAC-protected administrative access, server-side secret handling and audit logging for sensitive operations.
- Created a reusable Pulumi and Docker framework that reduced green-field API setup time by 70%; automated Alibaba Cloud account and ECS provisioning with Puppeteer.

## EARLIER EXPERIENCE

**Student Programmer | Sik Sik Yuen** **Jul 2021 - Apr 2022**

*Hong Kong*

- Containerised legacy services with Docker and Kubernetes, reducing infrastructure cost by 25%, and built a Go API gateway with role-based access control.
- Integrated Mastercard Payment Gateway Services (MPGS) 3-D Secure into payment workflows, including challenge/completion handling and server-side verification.

## SELECTED ACHIEVEMENTS

WorldSkills Competition 2022 Special Edition - Web Technology Champion | Cathay Hackathon 2022/2023 - Champion & Most Popular Solution | IEEE Blockchain Hackathon 2022 - Third Place

## CERTIFICATIONS

CKA (2025) | AWS Solutions Architect - Associate (2024) | AWS Developer - Associate (2024) | Apple Certified Swift Developer (2022)

## EDUCATION

**City University of Hong Kong** | B.Sc. (Hons) Computer Science | 2020 - 2023

**Hong Kong Institute of Vocational Education** | Higher Diploma in Game Software Development | 2018 - 2020

Languages: Cantonese (Native) | English (Fluent) | Mandarin (Professional)