

# Arthur Lau

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## Profile Summary

A **Full Stack Developer** with 5+ years of experience, seeking new learning opportunities to enhance technical and leadership skills. Experienced in **complex projects** and collaborating across teams, with a strong ability to **quickly adapt** to new environments and technologies. **Effective communicator** and **problem solver** with an **optimistic outlook** on challenges.

## Experience

### Senior Software Developer -> Analyst Programmer, IVM Tech Limited

Aug 2023 – Jan 2025

HK fastest growing vending machine company currently second in market serving 2K+ user and 500K+ customer

- Spearheaded Hong Kong's first weighted smart vending machine, led a 3-person team and designed a scalable system with 95%+ inventory accuracy and real-time admin control by **Nextjs, Flutter, MSSQL**.
- Integrated Octopus Hardware **POS** and SoePay machines into **Android OS**, implemented custom app lifecycle management and security measures to prevent spam clicking/false triggering by 80%, using **Java** and **Kotlin**.
- Built an real-time admin portal for 100k+ users on vending machines managing \$1M+ monthly revenue using **NestJS** and **MSSQL**. Developed POS UI with **EJS, HTML, CSS**, and **jQuery**.
- Managed AWS EC2 with CloudWatch, S3, implemented CloudFront file caching that cut network costs by 60%. Automated CI/CD deployments using GitHub Actions and WSL for seamless AWS deployment.
- Coordinated 10+ **smart fridge partners** and 20+ **POS API integrations**. Managed **timelines**, man-hour **estimates**.
- Led a 2-person team in **ERP** modernization, cutting latency by 50% and manual processing by 60%. Migrated to **C#, AngularJS, MSSQL**, and **MQTT** for real-time communication.

### Software Developer, Makeitfun Studio

Jul 2022 – Aug 2023

An award winning digital creative studio specialising in delivering fun experiences via various gamification forms

- Developed promotion websites resulting 500k+ customers for UI/UX on **Next.js/React** with **SEO** and **Google Analytics**
- Designed on **Strapi** Framework for 10+ projects using **ExpressJS, MongoDB** and **Postgres**.
- Executed **POC** and demo for virtual concerts from **Mozilla Hubs**. Configured a 3D game panel, database, asset creation tools, and communication gateway by **Reactjs, Exlizer, Express, WebRTC(mediasoup)**.
- Programmed an AR app with image and gesture recognition using **MediaPipe** and **Vuforia** in **Unity**.

### Programmer, Flexsystem Limited

Jun 2021 – Jul 2022

A international provider of enterprise management solutions for 2000+ clients and 30+ countries

- Tailor-made **ERP sales, inventory, and procurement** system for company sized 1k+ using **React, C#, and ISAM**.
- Created **RPA** for **stress** and **unit** tests, reducing repetitive task time by 50%.

For additional working experience, visit the portfolio.

## Projects

### Reals

<https://github.com/hiiamarthur/reals>

- Developing an AIGC based app for itinerary dating planner and using python FastApi as server and flutter as client

### Mozilla Hubs

<https://github.com/hiiamarthur/mozilla-hubs>

- Developed from POC on Makeitfun Limited to further extends customized features like combined Hackweek Avatar Maker and changing fps angle on a 3d chinese chess game and Dockerized for microservice with k8s

## Skills

Programming Languages: C, C++, C#, Java, JavaScript (Vue, React, Angular, Nuxt, Next, Nest, Node, Express Solid), TypeScript, Python, PHP, Dart (Flutter), Kotlin, Erlang, Elixir, JS(), Go, Swift, Rust, Lua, R, Ruby, Cobol

Backend Development: C# (.NET Core, ASP.NET), Java (EE), JavaScript (Node.js, Express), Python (Django, Flask), Go RESTful APIs, GraphQL, FastAPI, Strapi

Frontend Development: Tailwind CSS, Material-UI (MUI), Bootstrap

Database Management: MySQL, PostgreSQL, MSSQL, SQLite, MongoDB, Redis, DynamoDB, Firebase

Version Control, CI/CD & Deployment: Git, GitHub, GitLab, TortoiseSVN, Docker, Kubernetes, Jenkins, GitHub Actions

Cloud Platforms: AWS (EC2, S3, CloudFront, CloudWatch, Lambda, DynamoDB, RDS, IAM), Cloudflare, Firebase

Web Servers, Testing & Performance: Apache, Nginx, IIS, Jest, Selenium, Playwright, Mocha, NUnit, PyTest, JMeter, k6

## Certificate

### AWS Certified Solution Architect- (In Progress)

## Education

Chinese University Of Hong Kong – Bachelor Degree in Computer Science

Jun 2021

Hong Kong Community College – Associate Degree in Information Technology

June 2017