

# ASVIN ANG CHIT SIK

PMO Director · Project Management · Strategy · Digital Infrastructure · AI · Digital Transformation

English (Native) | Malay (Proficient) | Mandarin (Intermediate, spoken)



[linkedin.com/in/asvinang](https://linkedin.com/in/asvinang)

[github.com/asvinang](https://github.com/asvinang)

[asvinang.github.io](https://asvinang.github.io)

## EXECUTIVE SUMMARY

A senior leader with 18 years of experience across civil engineering, infrastructure development, and digital transformation – with a consistent record of building the tools and systems that others rely on to make decisions and deliver outcomes.

Uniquely positioned at the intersection of **deep domain expertise** and **applied AI**: having designed transport masterplans, delivered data centre pre-development programmes across APAC, and independently built geospatial platforms, multi-agent AI pipelines, and PMO automation systems using Python, React, and large language models.

Equally effective as an engineer, a strategist, and a builder – **the person who understands the problem, designs the system, and ships the tool.**

## CORE COMPETENCIES

### AI & Intelligent Systems

Multi-agent pipeline design  
LLM integration (Claude, OpenAI)  
Geospatial AI & automated analysis

### Infrastructure Development

Data centre pre-development (APAC)  
Industrial park masterplanning  
Site selection & technical due diligence

### Digital Transformation

Enterprise digitalisation strategy  
Legacy-to-cloud migration  
IoT, sensors & smart infrastructure

### Geospatial & Data Platforms

Full-stack geospatial web apps  
QGIS automation & spatial analysis  
Open data pipelines (OSM, government)

### Programme & PMO Leadership

End-to-end programme architecture  
Executive reporting & governance  
Cross-functional team leadership

### Engineering Leadership

Civil, transport & hydraulic design  
Procurement & contract management  
Multi-disciplinary technical oversight

## WORK EXPERIENCE

Mar 2025 to  
current

### PMO Director

Zerra DC, SG

- Leads the **Corporate PMO function** across Legal, Customer Success and PMO – acting as Strategic Integrator between commercial, design, development and finance in a startup DC environment.
- Established the E2E Asset Delivery Model** (7-stage gates, standardised RACI) and designed the Smartsheet ecosystem and Confluence knowledge hub, creating a single source of truth for the organisation.
- Co-developed the **Elemental Cost Model** for standardised capex planning and coordinated the full rebranding transition from AGPDC to Zerra DC.

Apr 2023 to  
Mar 2025

### Senior Program Manager

AirTrunk (Blackstone), SG

- Led the **end-to-end pre-development programme** for 30+ data centre projects across Singapore and Malaysia, reporting to the CEO and executive leadership.
- Designed and deployed the **Programme Management Framework** – gates, templates, reporting cadence and risk governance – adopted across the full project portfolio.

Nov 2021 to Apr 2023	<b>Technical Manager – Land Acquisition (APAC)</b>	Yondr Group, SG
	<ul style="list-style-type: none"> <li>• Led <b>technical due diligence and site acquisition</b> across APAC – Japan, Malaysia, Indonesia, Thailand – supporting investment negotiations and condition precedents.</li> <li>• Supported acquisition of a <b>300MW data centre site in Johor, Malaysia</b>.</li> <li>• Redesigned the <b>Fatal Flaw Analysis framework</b> (ISO 13000) and built an <b>automated QGIS site assessment tool</b> cutting per-site evaluation from 3 hours to 15 minutes.</li> </ul>	
Dec 2020 to Nov 2021	<b>Senior Manager – Deputy Head, Design &amp; Construction</b>	Sembcorp / Kendal, ID
	<ul style="list-style-type: none"> <li>• <b>Deputy Head, Design &amp; Construction</b> for a 1,000ha industrial park.</li> <li>• Led Planning, Construction, IT and procurement departments (30 staff); <b>spearheaded digital transformation</b> – IoT sensors, smart monitoring, mobile tenant app, asset management QR system, and full cloud migration.</li> <li>• Delivered <b>USD 500k savings</b> in procurement negotiations; developed 1,000ha expansion masterplan including 300+ land acquisition strategy.</li> </ul>	
Sep 2015 to Dec 2020	<b>Assistant Manager / Manager</b>	Sembcorp Development, SG
	<ul style="list-style-type: none"> <li>• Managed end-to-end real estate development – feasibility, procurement, design and construction – across industrial parks in Vietnam, Indonesia and Myanmar.</li> <li>• Developed the <b>500ha Myanmar Hlegu Industrial Park Infrastructure Masterplan</b> in GIS with 8-year cost and financial model; oversaw delivery of 30,000m<sup>2</sup> of warehouses in Vietnam.</li> </ul>	
2007 to 2015	<b>Engineer → Senior Engineer → Assistant Team Lead</b> Surbana / Halcrow / AKSWard	
	<ul style="list-style-type: none"> <li>• Transport masterplans for <b>Kigali, Bujumbura, Amaravati, Zhongwei and Changi East Industrial Zone</b>; roads and infrastructure design for <b>Changi Airport Terminal 5</b> pre-construction works.</li> <li>• Flood mitigation design for River Thames and Bangkok; standardised flood simulation workflows, cutting preparation time from 2 hours to 10 minutes per run.</li> </ul>	

## SELECTED PROJECTS

### Emerra.io – Geospatial Platform

Browser-based infrastructure site suitability analysis: constraint scoring, weighted layers, automated red flag reports.

React · FastAPI · GeoPandas · Firebase · Overpass API

Personal · [emerra.io](#)

### PMO Intelligence Suite

Smartsheet-to-Confluence automation: live data sync, AI-generated narrative reports, executive dashboards, access management.

Smartsheet API · Python · Power Automate · Confluence

Zerra DC

### Multi-Agent Market Entry Analyst

Nine-agent AI pipeline producing branded DC market entry reports covering power, land, regulation, climate and competition.

Claude API · Python · Multi-agent orchestration

Personal project

### Fatal Flaw Analysis Tool

Automated QGIS site risk scoring across flood, seismic, aviation and topographic constraints – cut assessment time from 3 hours to 15 minutes.

QGIS · Python · Spatial analysis

Personal Project · Live demo available

## TECHNOLOGIES & TOOLS

### AI & LLMs

Claude API  
OpenAI API  
Multi-agent design  
LLM prompt engineering  
Agent SDK

### Geospatial & Data

QGIS · ArcGIS  
GeoPandas · Shapely  
Overpass API  
FastAPI  
Firebase / Firestore

### Development

Python  
React  
Google Cloud Run  
GitHub Pages  
Flutter / Android Studio

### PMO & Workflow


Smartsheet API  
Confluence  
Power Automate  
Microsoft Project  
L<sup>A</sup>T<sub>E</sub>X typesetting

## EDUCATION, CERTIFICATIONS & MEMBERSHIPS

### MEng in Civil Engineering

University of Portsmouth, UK

 2006–2009

 Distinction

### BSc in Building Construction Management

Sheffield Hallam University, UK

 2006

 2nd Class Upper Honours

### Advanced Diploma Technology (Building)

TAR College, Malaysia

 2002–2006

 Merit

## Certifications & Memberships

### Project Management Professional (PMP)

Member (MICE)

Member (MCIHT)

Member

Member

Project Management Institute

Institution of Civil Engineers, UK

Chartered Institute of Highways & Transportation, UK

Board of Engineers Malaysia (BEM)

Mensa Singapore – SIG Director (2022/2023)

References available upon request. Extended CV and project portfolio at [asvinang.github.io](#)