

CAI WEIYU

PROJECT & PRODUCT LEADER |
SOFTWARE MANAGER



CONTACT

+65-9231-5056

caiweiyu@gmail.com

Singapore

<https://caiweiyu.com>

PROJECT LINKS

[My GitHub](#)

[3D SG Map](#)

[Regional Landscape Map](#)

[Landbox.sg - a Digital Twin Project](#)

[Wonder Earth App](#)

TECH SKILLS

- **Geospatial:** Maplibre, Mapbox, PostGIS, OSM, OneMap, Vector tile
- **C#, Python, Typescript, C++, Java, Javascript, Swift, Kotlin**
- **Web:** React, Node.js, Next.js, Three.js
- **DB:** MongoDB, MySQL
- **DevOps:** Docker, Nginx, Automation test, CI/CD, Agile
- **Mobile:** Android/iOS, React-Native
- **Cloud:** AWS, Google Cloud, Firebase, Cloud Functions.
- **Tools:** Git, Perforce, Linux, Android Studio, Xcode



PROFILE

I'm a **hands-on software manager** who leads teams to build smart solutions that drive business results. I work closely with **stakeholders**, **keep risks** in check, and make sure projects meet all **compliance** standards. My focus is on delivering real innovation and **successful projects** that align with **business goals**.



PROFESSIONAL EXPERIENCE

Yilumi Studio, Singapore

2020 - PRESENT

Founder & Head of Product & Engineering

- **Led Landbox.sg**, a digital twin web app transforming Singapore's HDB BTO process.
 - Led **stakeholder engagement** and **Agile project management**, securing **HDB recognition** and ensuring timely delivery.
 - Managed **risk and compliance**, addressing **regulatory concerns** and **data security**, earning **PMO recognition** for Landbox.sg.
 - **Tech Stack:** React, Node.js, Next.js, AWS EC2, Secured API, Docker Containerization, Typescript.
- **Led SG 3D Map**, a public accessible **geospatial map platform**.
 - Built a custom Vector Tile server (PostGIS) using OSM, OneMap, HDB data.
 - Integrated Three.js + MapLibre for rendering with **RESTful APIs** for location queries.
- **Led Wonder Earth App**, a high-scale mobile product, leading to 5M+ downloads and \$600K+ revenue.
 - Managed **full development lifecycle**, from planning to launch.
 - **Navigated regulatory hurdles** to achieve success in China.
 - **Recognition:** HuaWei Gallery Editor's Choice (Nov 2022).
 - **Tech Stack:** Unity 3D, C#, Android, iOS, MangoDB, Microservice, CDN, Restful APIs.

Bandai Namco Studio Singapore

2016 - 2020

Senior Software Developer

- **Project Leadership:** Assisted Product Managers in **scrum planning**, project estimation, and delivery.
- **Stakeholder Communication:** Acted as a bridge between technical teams & business stakeholders.
- **Risk Mitigation:** Identified project risks using the **risk matrix**, ensuring delivery without disruptions.
- **Agile Development:** Created key systems in video games and prototypes.

Autodesk Singapore

2013 - 2016

Software Developer

- **Process Improvement:** Implemented **CI/CD & test automation** to accelerate development cycles.
- **Project Execution:** Made development efforts for Maya, ensuring high-quality software releases.

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LANGUAGES

- English
- Mandarin Chinese

Lucasfilm Singapore

2010 - 2013

Software Developer

- DevOps & Security:** Established automated backup & asset management pipelines.
- Operational Efficiency:** Developed tools improving production workflows in VFX and animation.

LEADERSHIP & MANAGEMENT SKILLS

Stakeholder Communication: Applied **stakeholder analysis** and the **power-interest grid** to engage key decision-makers, as seen with HDB for Landbox.sg

Project Delivery: Applied **PMP skills, scope management**, and **critical path analysis** to ensure successful execution, as seen in Wonder Earth's China expansion.

Risk Mitigation: Took a **proactive, solution-focused** approach, using the **risk matrix** to address concerns, exemplified by countering a competitor's false regulatory report.

Security & Compliance: Implemented **regulatory compliance** and **data security policies**, ensuring project stability.

TECHNICAL EXPERTISE

Project Management: Agile, Scrum, Project Roadmaps, Risk Matrix, Critical Path Analysis, Budgeting

Software Development: Full Stack Web & Mobile, Cloud Infrastructure, DevOps

Web Full Stack: React, Node.js, TypeScript, Next.js, Three.js, MongoDB, Restful APIs

Geospatial: Maplibre, Mapbox, PostGIS, OSM, OneMap, Vector tile, web mapping, location based service.

Security: AWS IAM, Secured API gateway, DNS Routing, Nginx

Tools & Platforms: AWS, Docker, CI/CD, Jira, Confluence

CERTIFICATION

Professional Scrum Master I (PSM I)

Issuer: Scrum.org

EDUCATION

Master of Science, Digital Media

2009 - 2011

Nanyang Technological University

GPA: 4.50 / 5.00

Bachelor of Engineering, BioEngineering

2003 - 2007

Nanyang Technological University

2nd Upper Honors