

# CAI WEIYU

PROJECT & PRODUCT LEADER |  
SOFTWARE MANAGER



## CONTACT

+65-9231-5056

caiweiyu@gmail.com

Singapore

[https://caiweiyu.com/geospatial\\_resume](https://caiweiyu.com/geospatial_resume)

## 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.

# CAI WEIYU

PROJECT & PRODUCT LEADER |  
SOFTWARE MANAGER



## CONTACT

- +65-9231-5056
- caiweiyu@gmail.com
- Singapore
- [https://caiweiyu.com/geospatial\\_resume](https://caiweiyu.com/geospatial_resume)

## 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

## 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