

Chan Meng

Web/Mobile App & AI/ML Infrastructure Engineer



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INTRODUCTION

Full-stack developer with specialized expertise in women's health technology, combining React/Next.js, TypeScript, Python, and cloud infrastructure to build impactful web applications. Currently driving technical innovation as CTO at FreePeriod and AI/ML Infrastructure Engineer at Sanicle, delivering enterprise-grade solutions for workplace health management with AI integration.

Distinguished speaker at the UN CSW 69 Beyond Beijing 30 Conference, showcasing how AI technology effectively addresses workplace gender inequities. Passionate mentor dedicated to supporting women in STEM through the Forward with Her program, with proven impact across a diverse network of mentees from prestigious universities. Master's graduate with Distinction from Lincoln University, bringing academic excellence and practical implementation skills to every project.

Combines technical leadership with minimalist design principles to create elegant, efficient solutions while fostering inclusive development environments that empower teams to deliver exceptional results.

EXPERIENCE

Sanicle, Remote — Senior AI/ML Infrastructure Engineer

Mar 2025 - PRESENT

Led the development of two key products that helped Sanicle achieve IBM Silver Partner certification through close collaboration with the IBM team. Currently representing Sanicle in strategic discussions with Google to secure investment funding and startup resources.

- Designed and developed Sanicle's corporate website using **Next.js 15** and **React 19**, integrating **IBM Cloud watsonx AI** as an interactive customer service assistant that engages visitors through conversational interface to better understand Sanicle's offerings
- Engineered Sanicle.Cloud, a comprehensive **SaaS platform** for workplace women's health management (menstrual and menopause wellness), featuring role-based dashboards for employees and HR departments with predictive absenteeism alerts
- Implemented IBM Cloud watsonx AI within the Sanicle.Cloud employee dashboard, enabling AI-powered health consultations and automated leave requests, significantly enhancing user experience for corporate clients
- Built secure multi-tenant architecture with end-to-end encryption and GDPR compliance using **PostgreSQL** and **Drizzle ORM**, ensuring complete data isolation between organizations while maintaining system scalability

FreePeriod, Remote — Full-Stack Developer & CTO

Nov 2024 - PRESENT

Leading software development for a HKUST(GZ)-incubated startup that builds smart

EDUCATION

Master of Applied Computing - Lincoln University

Nov 2023 - Dec 2024 | New Zealand |
Dean's List Honoree (**top 5%**) | with
Distinction (**GPA above 80%**)

Bachelor of Geography Science - Jiangsu Normal University

Sep 2012 - Jun 2016 | China | with
Distinction (**GPA above 80%**)

SKILLS

PROGRAMMING LANGUAGES

TypeScript • JavaScript • Python • Java •
Go • HTML • CSS • SQL • R

FRONTEND

React • Next.js • Angular • Tailwind CSS •
Redux • Framer Motion • Three.js

BACKEND

Node.js • Express • REST API • Flask •
FastAPI • WebSocket • Authentication •
Real-time Data Processing

DATABASES

PostgreSQL • MongoDB • MySQL • SQLite
• Database Design • Query Optimization

ADDITIONAL EXPERTISE

System Architecture • API Design •
Performance Optimization • Technical
Documentation • Test-Driven
Development • Agile Methodologies

ACHIEVEMENTS & COMMUNITIES

- **United Nations CSW 69 Speaker** —

vending systems for feminine hygiene products in public spaces. Primary responsibility includes designing and developing the company website and database infrastructure.

- Architected full-stack solution using **Next.js 14** with App Router for company website
- Built responsive interface using **React 18**, **Tailwind CSS**, and **shadcn/ui**
- Created custom i18n solution for English-Chinese localization
- Implemented location services with **Google Maps API** and analytics dashboard using **Recharts**

ByteDance, Remote — *Backend Developer*

Nov 2024 - Mar 2025

Contributed to TikTok’s microservices-based ecommerce platform development, integrating AI recommendations within a 7-member team guided by 22 senior backend engineers.

- Developed core microservices using **Spring Cloud** for user authentication, product management, and order processing
- Implemented database architecture using **MySQL** with **Redis** caching and **RabbitMQ** message queue optimization
- Integrated **Qwen LLM** API for intelligent product recommendations and search functionality
- Built responsive UI components with **Vue3** and **Element Plus**

CORDE, Christchurch — *Mobile Application Developer*

Jun 2024 - Nov 2024

Led frontend development and database architecture of offline-first mobile application for field maintenance operations in 5-member Agile team, contributing 60% of codebase and 98% of documentation.

- Designed **SQLite** database schema scaling to 18 tables for offline data management
- Implemented automated background sync and real-time status monitoring
- Integrated **ArcGIS** mapping services with GPS tracking
- Developed **React Native** mobile UI with dark/light themes and dynamic forms for field operations

RECENT PROJECTS / OPEN-SOURCE

[FriendScope](#) — *Full-Stack Web Application*

Independently developed a privacy-focused relationship assessment platform featuring comprehensive analysis and visualization tools, gaining significant user traction with consistently positive feedback.

[Google News MCP Server](#) — *Model Context Protocol Integration*

Pioneered an early MCP implementation enabling AI assistants to access real-time news. Successfully published to multiple MCP platforms and as an npm package, demonstrating proficiency with next-generation AI interaction protocols.

[Gradient SVG Generator](#) — *Dynamic SVG Generation Suite*

Developed an open-source platform for generating animated gradient SVGs through a web interface and API, garnering recognition from Reddit’s r/lgbt community for its inclusive design templates.

[Tencent Meeting Video Downloader](#) — *Chrome Browser Extension*

Developed a browser extension that automates video downloads from Tencent Meeting with URL detection and custom save options. Published on Chrome Web Store with positive ratings and zero data collection.

Explore 50+ additional open-source projects on [my GitHub](#).

Beyond Beijing 30 Conference, New York, Mar 2025

- **Outstanding Performer** — UN Women FemTech Hackathon, Mar 2025
- **Most Popular Mentor** — Forward with Her Program, supported by UN Women, Feb 2025
- **Excellence Award Winner** — FemTech China Women’s Health Technology Challenge, Dec 2024
- **SS-Rank Deep Contributor** — Award for Sustained Code Contributions in GitHub 2024
- **S-Rank Multilingual Developer** — GitHub Trophy 2024
- **Founder** — TechRosie GitHub Organization, promoting diversity in tech

CERTIFICATIONS

CORE DEVELOPMENT

- Software Engineer - HackerRank
- Frontend Developer (React) - HackerRank
- Problem Solving (Intermediate) - HackerRank

FRAMEWORKS & LANGUAGES

- JavaScript (Intermediate) - HackerRank
- Node.js (Intermediate) - HackerRank
- Angular (Intermediate) - HackerRank
- Go (Intermediate) - HackerRank
- Java Professional - JetBrains

DATABASE & API

- SQL (Advanced) - HackerRank
- Rest API (Intermediate) - HackerRank
- Data Analysis - Microsoft

DEVELOPMENT TOOLS & PRACTICES

- GitHub Professional - GitHub
- Docker Professional - Docker Foundation
- Ubuntu Linux Professional - Canonical
- Agile Project Management - Atlassian
- System Administration - Microsoft
- Project Management - Microsoft
- Cybersecurity - Microsoft

REFERENCES

Professional references available upon request.