

Max Young (Le Yang)

Senior Software Engineer

Vehicle Platforms · OTA · Fleet Operations

Beijing, China

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Profile

Senior Software Engineer with 13+ years of experience building production systems, including 4+ years in autonomous driving. Specialised in vehicle platforms, SOTA/FOTA systems, calibration tooling, and fleet operations software, with end-to-end ownership from product definition and architecture to implementation and production deployment. Strong in Python, Linux, and backend/platform engineering, with additional experience in React, Go, and C++.

Professional Experience

2022–Present **Software Engineer**, *Rino.ai*, Beijing, China, Autonomous Driving

- Owned architecture, product definition, and technical direction for a three-person vehicle-platform team, turning separate engineering tools into reusable delivery infrastructure for R&D, factory, and fleet operations.
- SOTA Platform:** Reduced average software deployment time from approximately 30 to 10 minutes while scaling deployment capacity from 200 to 5,000 vehicles.
- FOTA Platform:** Architected and implemented an MVP for distributed vehicle upgrades across TBOX/ADCU nodes, covering orchestration, failure recovery, power-loss safety, vehicle clients, backend services, and web-based management.
- Vehicle Calibration Platform:** Built an end-to-end calibration workflow using Python, Shell, C++, and OpenCV, increasing factory throughput from 2–3 to 30+ vehicles per day and reducing field calibration time from 0.5–1 day to under 3 minutes.
- Fleet Operations Platform:** Built a Flask/React platform for incident management and route delivery across R&D and operations, contributing to a reduction in incident rate from 13 to 7 per 10,000 km within six months.
- Large-Map Distribution:** Designed delivery strategies for hundreds-of-gigabytes map datasets under limited storage and unreliable networks, improving transfer efficiency, resilience, rollback safety, and deployment visibility.
- Platform Reliability & Infrastructure:** Improved deployment reliability and operational visibility across thousands of vehicles through resumable transfers, service-health monitoring, deployment automation, version/state consistency, and reusable internal tooling.

Professional Experience (continued)

- 2017–2022 **Software Engineer**, *Dedao*, Beijing, China, Online Education & E-commerce
- Designed backend systems for inventory, orders and distribution; automated order ingestion and settlement across JD.com, Alibaba using Python/Django and Go/Gin.
 - Built financial recognition, settlement and analytics services in Flask, replacing manual office workflows and improving finance-team efficiency.
 - Improved service scalability and integration using Celery/RabbitMQ, Kafka/Faust, and GraphQL, while introducing TDD and contract testing to reduce defects and integration cost.
- 2014–2017 **Software Engineer**, *Kaoshixing*, Beijing, China, B2B SaaS
- Led architecture, full-stack development, DevOps and engineering coordination for an online examination platform, taking it from initial build to production scale serving 10,000+ enterprise customers. *Python, Flask, JavaScript, Linux*
- 2013–2014 **Map Quality Engineer**, *AutoNavi (Alibaba Group)*, Beijing, China, Mapping Services
- Analysed geospatial POI and road-network data, established map-asset quality-control standards, and advised data-collection planning and quality measurement.
- 2006–2013 **Geomatics Engineer**, *Beijing Engineering Corporation*, Beijing, China, Hydropower Engineering
- Delivered geospatial surveying and technical design for large-scale hydropower infrastructure projects in China and overseas.

Technical Skills

Domain	Vehicle platforms, SOTA/FOTA, fleet operations, software/map/configuration delivery, calibration tooling, deployment reliability
Backend	Python, Flask, Django, REST APIs, RabbitMQ, MQTT, MySQL, MongoDB
Systems	Linux, Shell, Docker, Git, CI/CD
Frontend	React, Next.js
Additional	Go, C++, OpenCV, TDD, contract testing

Education

- 2002–2006 **Bachelor's Degree in Geomatics Engineering**, *Hohai University*, Nanjing, China

Languages & Additional Information

Languages	English (IELTS Academic 6.5); Japanese (JLPT N2); Mandarin Chinese (native)
Mobility	Open to relocation abroad and to working in international teams
Interests	Distance running; certified third-level amateur marathon athlete in Beijing