

Théo Couerbe

French Engineering Student / AI/ML & Systems / Age 22 / Based in France

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Seeking 寻求: 3-Month AI/ML Engineering Internship 人工智能/机器学习实习
Start: June 14, 2026 (Flexible) | Shanghai 上海 / Hangzhou 杭州 / Shenzhen 深圳 / Beijing 北京
Visa: X2 internship visa (employer sponsorship, standard process)

Education 教育背景

上海交通大学 Shanghai Jiao Tong University (SJTU) Sep 2025 – Jan 2026
Academic Exchange – Electrical Engineering
• Applied ML, Statistics, IoT (Alibaba Cloud 阿里云), exposure to Chinese AI frameworks and tech ecosystem

École des Mines Saint-Étienne 法国矿业学校 2024 – 2027
General Engineering – Leading French Grande École
• Specializations: Machine Learning 机器学习, Optimization, Scientific Computing

MP Preparatory Classes – Lycée Chateaubriand 2021 – 2024
Rennes, France
• Intensive Math & Physics program (top 5% nationwide)

Technical Skills 技术能力

AI/ML 人工智能 PyTorch, TensorFlow, Scikit-learn, OpenCV, LLM integration (Ollama), Time series forecasting

Data Science 数据科学 SQL, Pandas/NumPy, Statistical modeling, Feature engineering, Data visualization (Matplotlib, Seaborn)

Systems 系统开发 C, C++, Rust, Python, Linux, Git, Embedded systems 嵌入式系统

Algorithms 算法 A*, Dijkstra, Genetic algorithms, Dynamic programming, Optimization

Key Projects 核心项目

AI Agent for Financial Time Series Analysis Python, Ollama, Scikit-learn
• Built LLM-powered agent with 100% reproducible pipeline: zero raw data exposure via JSON abstraction layer
• Processed 500K+ OHLCV data points with 7 technical indicators (RSI, MACD, Bollinger, ATR)
• Implemented Random Forest volatility forecaster + 50 Monte Carlo simulations for 72h crypto price prediction

Bike-Sharing Demand Forecasting 共享单车需求预测 Python, Scikit-learn, TensorFlow
• Analyzed 1.4M trips across 200 Chicago stations to predict hourly demand with 6 ML models
• Achieved Random Forest $R^2 = 0.41$ (MAE < 1 bike/hour), Naive Bayes 79% accuracy (AUC = 0.87)
• Engineered 18 features (temporal, spatial, weather) identifying hour-of-day as strongest predictor
• Co-authored 27-page research paper comparing interpretability vs. accuracy in operational ML

Drone Path Optimization Engine 无人机路径优化 C, A*
• Real-time A* planner: 50 Hz on ARM Cortex-M4, 12ms avg. for 100×100 grids, 98% success rate
• Dynamic obstacle avoidance with <45 KB RAM footprint for embedded constraints

Space Miner: 2D Game Engine from Scratch C
• Custom engine: physics, sprite rendering, input – 4,200+ lines pure C, stable 60 FPS

Work Experience 工作经历

Natra Chocolate Factory – Saint-Étienne Jan 2025 (1 month)
Programmed and configured robotic arms on industrial production line

Languages 语言能力

French 法语: Native • English 英语: C1 (technical fluency) • Chinese 中文: HSK2, actively studying (targeting HSK3 by mid-2026) • German 德语: B1