

Xyfer Chen

Computer Science Graduate • Backend / AI Tooling • Open-source Contributor
📍 Tainan/Hsinchu, Taiwan | 🌐 xyfer.im | 🗣️ cxyfer | ✉️ xyferim@gmail.com

Summary

Computer Science graduate with solid algorithmic training, graduate-level AI/ML coursework, and hands-on experience building Python/Rust services, LLM integrations, MCP tools, and search-backed applications.

Open-source contributor to high-visibility projects with thousands to 70k+ GitHub stars; merged PRs improved API compatibility, cross-platform behavior, and production reliability.

Built and maintained a Discord bot used across dozens of Discord servers, supporting scheduled coding challenges, submission tracking, and LLM integration.

Skills

Programming	Python, Rust, C++, JavaScript, C, Verilog, Dart
Backend	FastAPI, Flask, axum, REST APIs, GraphQL, SQLite
AI / LLM Tooling	LLM API integration, MCP, embeddings, vector search, agentic coding tools
Developer Tools	Git, Docker, GitHub Actions, CI/CD, WSL, CLI tooling
Fundamentals	Data Structures, Algorithms, Operating Systems, OOP
Languages	Mandarin Chinese (Native), English (TOEIC 805)

Open Source Contributions

- cc-switch** | *Rust, Tauri 2, MCP, Windows/WSL* (#580) (#592) (#644)
• Resolved cross-platform MCP compatibility issues across Gemini CLI timeout handling, WSL path detection, and Windows test failures, improving reliability across Windows and WSL environments.
- gemini-balance** | *Python, FastAPI, Gemini/OpenAI API proxy* (#200) (#270)
• Implemented Gemini Files API and native embedding endpoint support across request models, service layer, authentication, persistence, error handling, and logging.
- Instaloader** | *Python, data extraction, Instagram GraphQL* (#2652)
• Migrated Instagram profile metadata fetching from deprecated endpoints to GraphQL while preserving existing API compatibility.

Side Projects

- GeminiASR** | *Python, Gemini API, FFmpeg, multithreading*
Built a CLI transcription pipeline for long-form audio/video using FFmpeg chunking, parallel Gemini API requests, API key rotation, batch processing, SRT subtitle export, and TOML-based configuration.
- oj-api-rs** | *Rust, axum, SQLite, sqlite-vec, MCP integration, vector search*
Built a Rust/axum backend for competitive-programming problem retrieval, with crawler workflows, SQLite persistence, an admin dashboard, OpenAPI documentation, MCP integration, and vector-similarity search.
- leetcode-daily-discord-bot** | *Python, discord.py, SQLite, LLM API integration, Discord bot development*
Built a Discord bot used across dozens of servers for LeetCode daily challenges, with timezone-aware scheduling, slash commands, submission tracking, i18n, LLM integration, and caching.

Competitive Programming

Codeforces: 1979 (Candidate Master) ; **AtCoder: 1593 (4652nd)** ; **LeetCode: 2425 (2,363 / 874,449, Top 0.29%)**
2024 Collegiate Programming Examination (CPE), 6/7, ranked 51 / 2668 (Top 1.9%)

Education

國立陽明交通大學 National Yang Ming Chiao Tung University	Hsinchu, Taiwan
Graduate Coursework in Computer Science and Engineering	2024–Present
• Focus: Machine Learning, Computer Vision.	
國立成功大學 National Cheng Kung University	Tainan, Taiwan
B.S. in Computer Science and Information Engineering	2017–2023
• Focus: NLP, Information Retrieval.	
• Received B.S. degree in 2023 after prior coursework in Psychology (2017–2018) and Physical Therapy (2019–2022).	

Selected Coursework

- Deep Learning & Deep Learning Labs** | *A* [🔗 Coursework](#) | [🔗 Final Project](#)
• Read original papers, then implemented and trained SCCNet, ResNet, UNet, Conditional VAE, MaskGIT, and DDPM.
• Final project explored scheduler variants to improve RePaint computation efficiency.
- Data Visualization and Visual Analytics** | *A+* [🔗 Final Project](#)
• Visualized Taiwan regional voting results and analyzed relationships between voting patterns, income, and education levels.

Achievements

- 2023** 成功大學資訊系 113 級畢業專題展, 入圍決賽 (8 / 72 teams)
2020 第六十屆菁英盃全國大專院校辯論比賽, 季軍