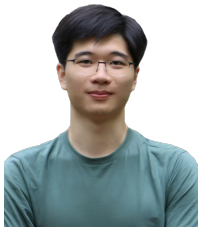
Xiyao Chen



(+86) 13372534033 | futuretech6@foxmail.com | futuretech6

Education

Zhejiang University | Computer Science | Master of Engineering (2022.09 - 2025.03)

- **GPA**: 91.44/100 (Top 10%)

Zhejiang University | Mixed Class (Chu Kochen Honors College) & Computer Science | Bachelor of Engineering (2018.09 - 2022.06)

- **GPA**: 4.41/5 (Top 15% in Mixed Class, Top 10% in Computer Science)

Employment

A quantitative trading firm [1] | **Quantitative Developer (2025.04 - Present)** *Permanent*
| **Quantitative Developer (2024.08 - 2024.11)** *Summer Intern*

- Participated in the development of a trading platform and simulation system; responsible for data integration with brokers and trading desks; maintained the stability and reliability of the live trading and strategy simulation environments.
- Participated in strategy development to improve the performance, stability, and profitability of trading strategies; Increased the query speed of the trading platform snapshot index by 4.3 times.

Alibaba Cloud | Infrastructure - Storage - Object Storage Service (OSS) [2] | **Intern (2024.05 - 2024.07)** *Summer Intern*

- Developed a Rust SDK for the OSS team to provide customers with a complete development toolkit for using OSS services.
- Independently developed a prototype that includes basic API implementations and extended API feature modules. The codebase consists of 15K lines, with a CodeCov of 94%, and complete documentation.

BlockSec | Audit Development Team & Vulnerability Analysis Team | Research Intern (2021.09 - 2024.01) *Research Intern*

- Independently developed Rustle, an automated audit tool for Rust smart contracts based on static analysis.
- Contributed to the development of automated audit tool Anshun for Ethereum smart contracts.
- Independently established the company's contract vulnerability alert system and participated in the company's vulnerability response efforts.

SDIC Intelligence (Meiya Pico) | Institute of Electronic Data Forensics and Intelligent Equipment Research AI Development Center | Algorithm Engineer Intern (2020.07 - 2020.08) *Daily Intern*

- Developed algorithms to identify possible image tampering. The functionality has been integrated into the company's product.

[1] A Shanghai-based quantitative trading firm with assets under management (AUM) over 10 billion CNY.

[2] OSS is a core business of Alibaba Cloud, holding the largest market share in China and ranking second globally, just behind AWS S3.

Projects

Rustle | BlockSec | Independent Development (2021.10 - 2023.03) *C++, Python*

- Developed an LLVM-based static analysis tool for NEAR blockchain smart contracts developed in Rust, addressing the challenges of Rust's complex syntax and the inefficiency of manual auditing. The project is open source on GitHub [3].
- Detected and reported several real-world and high-value vulnerabilities in projects such as Stader, Skyward, Rainbow Bridge, and Mango (Solana).
- Participated in the NEAR MetaBUILD hackathon and won a $20,000 USD prize; Received $50,000 USD in development funding from the NEAR Foundation.

Aliyun-OSS-Rust-SDK | Alibaba Cloud | Independent Development (2024.06 - 2024.07) *Rust*

- Customers can directly use the SDK in their Rust projects to interact with the Object Storage Service (OSS) server without knowledge of server-side interface implementations. A codegen framework was also developed, cutting code redundancy by 87% while greatly improving SDK usability and scalability.
- Independently developed a prototype that includes basic API implementations and extended API feature modules. The codebase comprises 15K lines, with 94% CodeCov, and complete documentation.

Anshun | BlockSec | Member (2023.04 - 2023.12) *Python*

- Developed a static analysis tool for Ethereum smart contracts written in Solidity, utilizing various static analysis methods.
- Built an on-chain alert system based on Anshun. Successfully provided multiple timely warnings, preventing the loss of over $300,000 USD.
- Developed a static analysis tool based on Anshun in collaboration with the Web3 leading exchange Uniswap, to analyze the latest version of its contract extensions.

RV-Kernel [4] | Course Project | Independent Development (2020.10 - 2021.01) *C, RISC-V Asm*

- Implemented a Linux kernel from scratch based on RISC-V hardware.

Watchpoint-Based Kernel Isolation | Laboratory | Member (2021.07 - 2021.09) *C, AArch64 Asm*

- Collaborative project with Huawei aimed at enhancing HarmonyOS's kernel security.
- Leveraged the hardware mechanism in Arm architecture for fault isolation between drivers and the kernel.

C2SafeRust | Laboratory | Leader (2021.04 - 2021.06) *C*

- Attempted to automatically rewrite C-written kernel drivers to Rust to address potential security issues in C-based kernels. Ensured kernel safety using Rust's built-in security mechanisms.
- Implemented detection and potential fixes for Use-After-Free (UAF) and Double-Free vulnerabilities.

Skills

- **Languages**: TOEFL 97/120, CET-6 631/710
- **Programming Languages**: Proficient in C/C++, Python, Rust; Familiar with Go, Java, JavaScript, Verilog HDL
- **Toolkit**: Proficient in Unix Shell, Makefile, Git (CI/CD), Docker (Dockerfile); Familiar with SQL (ORM), LLVM Toolchain

[3] https://github.com/blocksecteam/rustle

[4] https://github.com/futuretech6/RV-Kernel