Arys Aikyn

+86 188 0136 2337 hi@arysaikyn.com linkedin.com/in/arysaikyn/ github.com/arysaikyn

Education

Tsinghua University Expected Graduation: May 2029
Bachelor of Science in ***Computer Science and Technology*** *Beijing, China*

Swarthmore College 2023 – 2024
Completed coursework toward B.S. in ***Computer Science*** *— Richard Rubin Scholar* *Swarthmore, PA*
Selected coursework: Data Structures & Algorithms (A-), Intro to Computer Systems, Calculus II, Intro to Economics

Languages

English (fluent) · **Mandarin** (fluent) · **Kazakh** (native) · **Russian** (conversational)

Projects

Kratos — LLM-driven whole-society simulation | *Python, TypeScript, React, Docker* 2026
- Co-built a coupled simulation of Thai politics, economy, and opinion: **1,500+ agents**, **17k relationships**, a **live daemon** ingesting real Thai news and market data, and resolvable forecasts scored against real outcomes
- **Owned** the infra & product layer: built the **React visualization dashboard** for the simulation engine and **restructured the products/ monorepo** (PR #18) across a PR/code-review workflow with two collaborators
- Built the **Brier-scorecard component** evaluating agent forecast direction against realized outcomes, shipped in the products layer

EventSnap | *Swift, SwiftUI, Vision, Speech, EventKit* 2026
- Built an iOS app that captures event details from photos, voice, and text using **on-device OCR and speech recognition** and creates calendar events
- Structured as MVVM with testable OCR, speech, and calendar services; calendar access scoped to **write-only** (no user event data read)

TriCore | *TypeScript, Next.js, C#, ASP.NET* October 2023
- Course-registration app: React front-end (10+ reusable components) over an ASP.NET API with web scraping across **140,000+ courses**
- Unified the course catalogs of a three-college consortium into one searchable platform with course ratings and a research-opportunity portal
- **2nd place** out of 30+ teams in a 24-hour hackathon

Experience

Undergraduate Research Assistant May 2024 - September 2024
Swarthmore College *Swarthmore, PA*
- Built the interactive front-end for the Dive Into Systems course book used by **500+ students**
- Created adaptive question-generation algorithms in JavaScript using stochastic optimization, reaching **95% confidence** in evaluation

Software Engineer — Swarthmore College Computer Society September 2023 - September 2024
Student-run ISP & infrastructure collective *Swarthmore, PA*
- Managed the servers providing online services to **1,600+ students**; **Dockerized** services to pin dependencies and survive OS upgrades
- Deployed an enterprise-grade host as a **Proxmox** VM server with **ZFS** storage

Accessibility Remediation Specialist October 2023 - September 2024
Swarthmore College *Swarthmore, PA*
- Remediated course content to WCAG standards with screen-reader support, **increasing engagement by 30%**

Technical Skills

Languages: Python, TypeScript, JavaScript, Rust, C, C++, Swift, SQL, HTML/CSS
Frameworks and Libraries: React.js, Next.js, Node.js, Express.js, TailwindCSS, SwiftUI
Infra and Tools: Docker, Git, PostgreSQL, MongoDB, Redis, Proxmox, ZFS, Linux, GitLab CI, OpenCode, MCP