

Ular Kimsanov

ularkimsanov.com | github.com/ukimsanov | linkedin.com/in/ukimsanov

EDUCATION

Arcadia University - Glenside, PA
Bachelor of Science in Computer Science

GPA: 3.96
May 2027

EXPERIENCE

ZaNet Analytics Corporation | Software Engineer Intern | Philadelphia, PA Sep. 2025 - Present

- Shipped Steam billing microservice handling full subscription lifecycle via ISteamMicroTxn API with KV storage and cron jobs
- Architected 3 edge microservices on Cloudflare Workers (D1, KV, R2); built custom Worker layer bypassing framework stream truncation bug to enable 46MB+ file delivery (previously capped at 7.8MB)
- Engineered cross-platform auto-update system (macOS/Windows) with atomic binary replacement, debugging OS-level SIGPIPE
- Built Clever OAuth SSO with 3 auth flows across WebGL/desktop - JWT sessions, HTTP-only cookies, and token blacklisting

National Science Foundation | Software Engineer & Research Assistant | Remote Jan. 2025 - Present

- Architected serverless cybersecurity platform on Cloudflare Workers (Next.js 15, D1) achieving <50ms TTFB at 250+ locations
- Built dynamic module registry with prefetching and code splitting, reducing bundle size by 85% across 16+ modules
- Engineered type-safe DB layer (ACID transactions), PDF certificate pipeline with R2, and Core Web Vitals monitoring

Astera Holdings | Software Engineer Intern | Boston, MA May 2025 - August 2025

- Co-led architecture of real-time prediction market platform (500k+ users)
- Engineered LangGraph multi-agent system (5+ agents) on FastAPI + WebSockets with ~100ms streaming latency
- Built cross-platform trading terminal (SvelteKit, Capacitor) with real-time order book and offline-first CRDTs for conflict-free sync
- Automated sports analytics pipeline (ingestion → features → sentiment → odds modeling) with end-to-end inference under 500ms

PROJECTS

Sagent | [GitHub](#) | *TypeScript, Next.js, Cloudflare Workers, Durable Objects, D1, Vectorize*

- Built a full-stack multi-tenant WhatsApp sales agent for product Q&A, recommendations, and lead capture from chat
- Hardened webhook pipeline: atomic session state (Durable Objects), KV idempotency dedupe, DLQ retries + backoff
- Shipped admin dashboard with lead analytics, conversation history, and catalog CRUD on WorkOS auth and R2 storage

Minerva | [GitHub](#) | *TypeScript, Next.js, Zoom SDK, HeyGen, Manim, Anthropic*

- Built real-time AI avatar tutor conducting live Zoom sessions with Socratic questioning and adaptive teaching style
- Integrated on-the-fly math visualizations (Desmos, GeoGebra, Manim) generating 3Blue1Brown-style explainer videos in-session
- Engineered low-latency pipeline connecting HeyGen avatar to Zoom with consistent sub-second turn-around time
- Designed parent dashboard with per-session progress reports, strength/weakness tracking, and learning recommendations

StreamRank | [GitHub](#) | *Java 21, Spring Boot, Next.js, PostgreSQL*

- Built hybrid video-feed ranking (affinity + collaborative filtering + diversity re-rank) reducing filter-bubble repetition
- Fixed N+1 queries via batch scoring; cut latency ~2.5s → ~250ms by prefetching and scoring 30–50 candidates in-memory
- Shipped full product (JWT auth, infinite scroll) + offline eval dashboard (Precision@K, NDCG, CTR proxy)

AWARDS & ACHIEVEMENTS

- **TreeHacks 2026** (Stanford) - Winner: Education Track (Zoom) & HeyGen Sponsor Track | (~1,100 hackers)
- **ICPC Regional** - Top 5 (2025), Top 10 (2024)
- **National Cyber League** -Top 3% (2025), Top 4% (2024)
- **AWS Solutions Architect Certification** (2025)
- **Dean's Distinguished List** (5x), **Dean's Honors List** (5x)

SKILLS

Languages: Python, TypeScript, JavaScript, Java, C/C++, SQL, Bash, C#

Frameworks: React/Next.js, Node.js (Express), Vue, Angular, FastAPI, SpringBoot, SvelteKit, LangChain/LangGraph

Databases: PostgreSQL, SQLite, Supabase, MongoDB, Firebase, ChromaDB

Developer Tools: Cloudflare Worker, AWS, GCP, Vercel, Git, Docker, CI/CD, Kubernetes, Sentry, REST APIs, WebSockets, SSE, MCP