

NATE WHITE

AI Engineer | C++ / C# / Python / System Design / ML

Chicago, IL | (425) 518-1209 | NateWhite.dev@gmail.com

linkedin.com/in/nathan-white-799765218 | github.com/nateprogram | natewhite.dev

Summary

AI Engineer at Cyclotron, Inc. C++, C#, Python, and TypeScript engineer. Shipped a scheduling app to web, iOS, and Android under my LLC. Built a live ML trading research platform and a C++ game engine that shipped a game to Steam. I use Claude Code to ship MVPs fast. Shipped games with teams of 6 and 19 at DigiPen.

Skills

Languages: C++, C#, Python, TypeScript, Java

Frameworks & Engines: PyTorch, FastAPI, Next.js, React, Capacitor, Unreal Engine 5, Unity, OpenGL

Tools, Infrastructure & Databases: Git, Docker, Azure DevOps, Jenkins, Vercel, Linux, PostgreSQL, Prisma, SQLite

Education

BS Computer Science & Game Design | DigiPen Institute of Technology | Redmond, WA | 2021 - 2026

Experience

AI Engineer | Cyclotron, Inc. | Remote, US | Jul 2026 - Present

Azure DevOps | Anthropic Associate Certified

Founder & Engineer | Veltarium Software LLC | Chicago, IL | Mar 2026 - Present

- Built SquadPact, a scheduling, RSVP, chat, and payments app for adult soccer leagues, shipped to web, iOS, and Android from one TypeScript codebase (Next.js + Capacitor).
- Designed a 30-model Prisma schema and 114 API route handlers covering leagues, seasons, rosters, events, RSVPs, team and direct chat, payments, and a player marketplace.
- Per-league scrapers (GSSL, Rats) fill in schedules, teams, and results. A scheduled job moves each team through commitment, recruiting, payment, and active phases.
- Integrates Neon Postgres, Clerk auth, Stripe (platform fee), Firebase push, Resend email, and Vercel Blob.
- Also shipped Budget Buddy (web paycheck planner) and Adaptive Strength Trainer (Android AI training app).

Software Development Intern | Spur Reply | Redmond, WA | Jun 2021 - Aug 2021

- Shipped React + TypeScript client microsites through the firm's .NET + Azure DevOps pipeline.
- Built Power BI dashboards on client data for several projects.

Software Development Intern | Spur Reply | Redmond, WA | Jun 2020 - Aug 2020

- Automated a weekly newsletter to 10,000+ Microsoft employees that had been assembled by hand.
- Built an employee morale survey in Microsoft Power Automate that ran inside Microsoft Teams.

Projects

StockAI | Live ML trading research platform | Python, PyTorch, FastAPI | 2024 - 2026

- Designed a multi-head LSTM that predicts stock price moves from Yahoo Finance data, news, and social posts (YouTube, X, Reddit).
- ~11,500 lines of Python across 42 modules. Correlation analyzers feed the LSTM, which predicts 10 timeframes.
- A retrainer scores past predictions, adjusts feature weights, and rolls back automatically when accuracy drops.

Mayhem Engine | Custom C++ game engine built from an empty VS project | C++, GLFW, rapidjson, OpenGL | 2023 - 2024

- Built a particle system (~1,260 LOC) whose JSON emitter files hot-reload without a rebuild.
- Wrote the stat/upgrade system (~710 LOC), so designers tune each upgrade level by editing JSON.
- Designed the input layer over GLFW. Shipped Zeppelin Rush, a tower-offense game, to Steam on the engine.

Genetic AI | Genetic algorithm that learns to play a game | Python | 2024

- Wrote a Python genetic algorithm that played Zeppelin Rush and found a three-star strategy in 16 generations.
- Started from 60 random playthroughs and bred and mutated the best ones. It beat the best human score after 14 generations.
- Its runs showed the designers where the game was unbalanced.

Treasure Party | Local 4-player couch party game | Unity, C# | 2024

- Owned several minigames, each with its own C# state machine.
- Wrote the game's AudioManager, which persists across scenes and pools channels by priority.