Andy Ye

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github.com/idke64 | https://andyye.vercel.app

EDUCATION

Georgia Institute of Technology   Atlanta, Georgia
Bachelor of Science in Computer Science   Aug 2024 – Present

Neuqua Valley High School   Naperville, Illinois
GPA: 4.0/4.0   Aug 2020 – May 2024
1560 SAT, Summa Cum Laude, 5s on 16 APs

EXPERIENCE

CODEBYTES   Naperville, Illinois
Co-Founder, Organizer, Full-Stack Developer   Aug 2023 – Present
- Organized multiple inter-school programming competitions across the Chicago suburb area, attracting 60+ in-person participants from 5+ schools.
- Contributed to the design of 30+ algorithmic programming problems, along with meticulously-crafted test cases and constraints.
- Designed and created a comprehensive website, utilizing modern web technologies and techniques to streamline registration, problem submission, automated judging, and real-time contest rankings.

HIGH OAKS ROBOTICS   Naperville, Illinois
Team Member   Sept 2022 – May 2024
- Designed and assembled several complex, competition-ready robots meshing various components together such as multi-stage lifts, advanced intake mechanisms, precision claws, and integrated visual/encoder-based odometry systems.
- Leveraged 3D printing (onShape), CNC, and Laser Cutters to manufacture intricate custom parts, ensuring seamless compatibility with existing mechanisms.
- Developed effective control algorithms for holonomic autonomous robot navigation via guided vector fields while minimizing path deviations through linearized quadratic regulators using the OjAlgo and JTransform libraries in Java.

GNOMON LEARNING   Naperville, Illinois
Co-Founder, Tutor, Full-Stack Developer   July 2023 – May 2024
- Led 20+ team of tutors providing free educational support both online through Google Meets and in-person for K-12 students on AP courses, standardized test preparation, and core academic subjects.
- Managed and scaled tutoring operation by partnering with the Naperville and Aurora Public Library.

PROJECTS

CODEBYTES WEBSITE | codebytes.codes | github.com/idke64/codebytes   2023 – 2024
- Architected a responsive, full-stack web application serving as both an event platform and a competition portal utilizing NextJS, React, and TailwindCSS, including integrated authentication and data management provided with Firebase.
- Implemented a robust submission and judging system supported by a REST API, featuring immediate feedback, access to past submission details, and a built-in code editor that supports 10 languages.
- Deployed highly-available, self-hosted backend judging server via CloudFlare Tunnels, incorporating worker processes to handle multiple requests concurrently.
- Created a flexible Markdown-based content structure with MDX to dynamically display blog posts and general information.

GNOMON LEARNING WEBSITE | gnomonlearning.org   2023 – 2024
- Engineered an innovative learning platform using NextJS, React, and TailwindCSS that provides information about tutoring services in an aesthetically pleasing user interface.
- Leveraged Firebase data management and user authentication functions, allowing for the creation and sharing of user-generated practice quizzes.

TEAM FORTRESS 2 MOD | github.com/idke64/shoehud   2022
- Developed a Heads-Up Display (HUD) mod for the game Team Fortress 2 by modifying in-game settings to optimize the user interface using ReScript and custom assets.

ADDITIONAL SKILLS

Technical Skills: HTML/CSS, JavaScript, TypeScript, Python, C++, Java, ReScript, Firebase, React, NextJS, TailwindCSS, Markdown, CAD, REST APIs, Git, Svelte, Sveltekit, Cloudflare, Mathematica, LaTeX
Languages: Fluent in Cantonese, English; Conversational Proficiency in Mandarin