# **Andy Yilin Tang**

(+1) 217-377-3508 • andyyt2@stanford.edu • andyta.ng • github.com/thewindsofwinter • linkedin.com/andyytang

### **Education**

**Stanford University** 

Stanford, CA

4.0 GPA, PURSUING B.S. IN COMPUTER SCIENCE

Sep. 2022 - Jun. 2026

 Relevant Courses: Modern Mathematics: Continuous Methods (MATH61 CM), Programming Abstractions (CS106B), Computer Organization and Systems (CS107), Introduction to Theory of Computation (CS154)

#### **Illinois Mathematics and Science Academy**

Aurora, IL

4.0 GPA, 1600 SAT

Aug. 2019 - Jun. 2022

- · Relevant Courses: Advanced Programming, Computational Science, Machine Learning, Android Application Development
- Completed online course on Data Structures and Algorithms from Princeton on Coursera

Skills

**Languages:** Java, C++, Go, Python, JavaScript, TypeScript, Bash, HTML/CSS **Systems:** Linux, Windows, Google Cloud, Docker

Frameworks: Node.js, React, Next.js, Express, Tailwind Tools: Git, LaTeX, Notion, Figma, Wireshark

Work Experience

Cloudflare Champaign, IL

SOFTWARE ENGINEERING INTERN

Jun. 2022 - Aug. 2022

- Benchmarked customer-facing API performance, hardened service against database outages, and reduced latency by 96% (Go).
- Implemented Magic User Role to eliminate hundreds of unnecessary permissions for network engineers (Identity & Access Management).

Fermilab Bavaria, IL

STUDENT RESEARCHER

Apr. 2020 - Jun. 2022

- Developed customized physics scripts to generate and process two million particle collision events on Linux (C++, Python, Bash).
- Presented dark photon search results at conference of the American Physical Society (April Meeting: Quarks to Cosmos).

#### Chung Lab, University of Illinois

Champaign, IL

STUDENT RESEARCHER

Jul. 2019 - Dec. 2021

- Created algorithm to automate brain damage analysis, preprocessing hundreds of images in seconds (Java).
- Accelerated data analysis by 98% (one week per data set) and coauthored epilepsy paper, published in PNAS 118 (51) on Dec. 15, 2021.

## **Technical Projects**

Quidio.co Remote, US

**DEVELOPER**Jun. 2022 - Aug. 2022

Authored functional specs to shape feature strategy for profile, notification, and question filtering features (Notion, Figma).

- Devised Discord outreach plan for 30+ programming communities with 50,000+ members.
- Built pagination algorithm to limit information overload by reducing questions per page to sixteen (TypeScript, Firebase).

24 Together Remote, US

DEVELOPER

Jun. 2022 - Aug. 2022

- Created responsive, serverless multiplayer game (Firebase, Node, React, Next.js, Typescript, Tailwind) deployed on Vercel.
- Adapted platform as a meeting place to chat and reconnect with eight friends scattered across the US, with 400+ rounds played so far.

#### **Junior High Math Contest**

Aurora, IL

CONTEST CHAIR/TECH LEAD

Jan. 2020 - Apr. 2022

- Developed contest web platform (Node.js, Express, EJS, Bootstrap, Google Cloud), serving up to 200 students per contest.
- Coordinated eight-person team to run day-long in-person (2020, 2022) and virtual (2021, 2022) contests.
- Recruited participant schools from four states in 2022 for first phase of nationwide expansion.

#### **Honors**

American Computer Science League, State Winner, 2021 US National Chemistry Olympiad, Honors (top 150), 2021 and 2022 Ross Mathematics Program, Participant and Junior Counselor, 2021 and 2022 **USA Computing Olympiad**, Gold Division, 2019 **Google Code Jam**, Round 1 Qualifier, 2022 **USA Physics Olympiad**, Bronze Medalist (top 150), 2022