# Tianshu (Terry) Yin

Atlanta, GA 30318 | +1(470)5211660 | yintry314@gmail.com Software and Web Engineer

#### **EDUCATION**

Shanghai World Foreign Language Academy (High School) GPA: 41/42 Sep 2021 – Jun 2024 Carnegie Mellon University Pre-College Program: National High School Game Academy Jul 2023 - Aug 2023 Georgia Institute of Technology (Bachelor of Science in Computer Engineering) GPA:4.0/4.0 Aug 2024 - Now Main Academic Awards: USAMO Qualified, Bpho Top Gold (global top 100), USACO Gold Oct 2022 – Feb 2023

# INDUSTRIAL EXPERIENCE

TalkMeUp Inc. May 2024 – Aug 2024

Website Engineer Intern

Remote, US

- Led a team of interns to test company websites, successfully identifying and resolving cross-browser and multi-device bugs, ensuring a seamless user experience.
- Enhanced backend efficiency by rectifying code issues and optimizing video loading methods, resulting in improved loading speed (by over 50%) through increased port openings and global access via mirrored servers across Asia.
- Designed and developed a user-friendly UI using React for an AI chatbot, integrating it with a Python-based backend and training the AI on interview data to significantly enhance its performance.
- Streamlined user data organization from **MongoDB** using a **Python** tool, facilitating easier future access and analysis; developed an interactive web interface for managers to visualize user and team activity data in real-time.
- Collaborated with project managers in weekly meetings to drive continuous product improvement and ensured compatibility between the AI backend and web frontend through comprehensive post-launch functionality testing.

#### SELECTED RESEARCH/PROJECTS

# Game Development Project on the Jam'O Drum | CMU Pre-College Program

Jul 2023 – Aug 2023

- Led a five-student group to develop a multiplayer game (four players used wheels to control characters on a round desk) on the Jam'O Drum platform within a four-week timeline.
- Gathered and consolidated various game ideas from each team member, resolved compatibility issues by creating a specialized package to convert normal signals into electric signals for platform recognition, launching game successfully.

#### LIGO's FFT Mechanism for Detecting Gravitational Waves | Shanghai, China

Dec 2022 – Jul 2023

- Collaborated with esteemed JHU astronomy professor to conduct research on gravitational waves as part of Pioneer program.
- Self-taught relevant mathematics for FFT (Fast Fourier Transform) and utilized Python programs to analyze data from NED (Nasa Educational Database).

#### CIGale (Code Investigating Galactic Emission) Complementary GUI | Shanghai, China

Jan 2022 – Dec 2022

- Developed GUI with python package Customtkinter for a command-line program named CIGale, enabling professors and senior students to easily navigate and run simulations without needing in-depth knowledge of command-line tools.
- Implemented automatized modeling using a simple greedy method to efficiently find the best parameters for each model.

Height of Sphere Fall and Water Splash | Shanghai World Foreign Language Academy (High School) Jan 2023 – May 2023

- Developed a theoretical model for fluid behavior, incorporating simplifications to account for complexities in fluid mechanics.
- Utilized **Python** packages such as fluids and matplotlib to create a simulated water splash with discrepancy below 25%.

#### ACTIVITIES (https://terrificterry.github.io/)

# National Highschool Astronomy Aerospace Organization(HAAO) (https://haao.xyz) Co-Founder and Leader

Oct 2022 - Now

Shanghai, China

- Co-founded HAAO with another astronomy club leader to address the lack of astronomy resources in high schools, and united 21 schools and over 100 active members through outreach efforts.
- Facilitated Saturday night seminars and speeches by university professors offering educational opportunities for members.
- Established online communication platforms, including a discord server and WeChat groups, to enhance information sharing.
- Led multiple long-term academic projects, including a successful initiative to analyze the moon's surface using photographs from members located nationwide.

### Computerization Club at Shanghai World Foreign Language Academy (High School) Leader

Sep 2022 – Now

Shanghai, China

- Maintained 20 members in the club, organized and facilitated meetings to assign project tasks and track project progress.
- Led multiple projects, such as improving the school's official website, developing an official website for the school's TEDx event, and training AI models for photo style personalization (https://galaxy2painting.xyz), (https://enspire.one).

### **SKILLS**

- Technical Skills: C++(Proficient), Python, Java(Proficient), HTML, Javascript(Proficient), CSS, Csharp, Matlab, MERN
- Language Skills: English, Chinese