Chris Ge

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EDUCATION

Massachusetts Institute of Technology | Cambridge, MA

- Expected Graduation: May 2027
- Candidate for B.S. in Computer Science and B.S. in Mathematics, GPA: 5.0/5.0
- Relevant Coursework: Design and Analysis of Algorithms, Introduction to Machine Learning, Introduction to Low-level Programming in C and Assembly, Probability and Random Variables, Differential Equations

Mission San Jose High School | Fremont, CA

June 2023

- Valedictorian, GPA: 4.0 (unweighted), SAT: 1600, ACT: 36
- Awards: USAMO Bronze Medalist (2x), USAPhO Silver Medalist (2x), USACO Gold, USNCO Honors

SKILLS

Technical: C++, Python, React, Angular, Flask, Next.js, HTML, CSS, JavaScript, SQL, MATLAB, Bootstrap, TypeScript, MongoDB, Express, Java, Git, PHP, LaTeX, Excel, Autodesk Fusion 360, PyTorch, Docker Languages: English (Native), Mandarin (Conversational)

EXPERIENCE

InterSystems | Software Engineering Intern

May 2024 - Present

- On the Application Services team in Boston, developed using InterSystems IRIS and SQL database language.
- Extended ObjectScript unit test coverage tool to Embedded Python, ensuring unit test efficacy and code robustness.
- Designed Angular UI for viewing unit test coverage, with a REST API and WebSocket to interact with the IRIS server.

MIT Media Lab | Undergraduate Researcher in Signal Kinetics Group

December 2023 - March 2024

- Created battery-free 3D underwater localization system for real-time tracking of mobile targets.
- Implemented a particle filter to combine data from IMU sensors with hydrophone outputs for better accuracy.
- Translated simulation code from MATLAB to Python & integrated with signal transmitter in a ROS system

Ross Mathematics Program | Junior Counselor

June – July 2022

- Attended courses by OSU professors on Dirichlet L-functions, Ergodic Ramsey Theory, and Erdos-Falconer problems.
- Guided and assisted 60 first-year campers through 30 number theory problem sets.

PROJECTS

Tone-me | Chinese Mandarin Pronunciation Assistant

October – December 2023

- Analyzed tones in spoken Chinese, identifying pronunciation issues and presenting the correct pronunciation.
- Fine-tuned Wave2vec2 transformer network model for tone classification task to evaluate user's tone pronunciations.
- Built full-stack demo using Next.js, React, and Flask, deployed as web service on Render for seamless user experience.

HOT Maps | OpenStreetMap Tutorial Game and Assessment

April 2024

- Created an online game for Humanitarian OpenStreetMaps to better attract and assess volunteer mappers.
- Developed in Javascript, using d3.js to project and visualize GeoJSON data for the user interface.

Softblocker | Productivity Chrome Extension

July - August 2022

- Temporarily freezes specific websites based on a time limit to promote productivity.
- Developed using Javascript, HTML, and CSS to manage users' browser activity, with 100 installs by unique users.

LEADERSHIP AND ACTIVITIES

MIT Undergraduate Math Association | Social Committee Member

September 2023 - May 2024

• Organized and hosted socials for 80 members, including estimathons, Pi Day celebrations, and card game tournaments.