

Resume

Jiayu Ellie SuEmail: jiayuelliesu@gmail.comWebsite: <https://jiayuelliesu.wixsite.com/ellie-su>**Born:** Tucson, AZ, in 2010**Education**

- 6th-8th grades, East Ridge Middle School, Ridgefield, CT, U.S.A., 2021-present
- K- 5th grades, Farmingville Elementary School, Ridgefield, CT, U.S.A., 2015-2021
- Preschool, New Vistas Center For Education, Chandler, AZ, U.S.A., 2014-2015

Academic Interests:

- Mathematics, Computer Sciences, Robotics, Physics, Music, Visual Arts, Creative Writing, Languages

Hobbies:

- Reading, solving Rubik's cubes, music composition using GarageBand, hiking with family, building legos with siblings (11-year-old sister and 6-year-old brother), swimming, and hanging out with friends

Sports:

- School cross-country club, squash team, tennis lessons, interested in rowing & sailing (attended sailing camp)

School Clubs

- No Place for Hate ambassador, STEM Club, Debate Club, Crochet Club, District Symphonic/Chamber Orchestras

Experience and Awards**Mathematics**

- **USAJMO** (USA Junior Math Olympiad) qualification in 7th grade, March 2023
- **3x AIME** (American Invitational Mathematics Examination) qualification since 6th grade; 2023 AIME II score: 6/15 (above the median score of 4/15); 2024 AIME II score: 10/15
- **Young Women in Mathematics Two Sigma Certificate** from Math Association of America (MAA); invited to attend MAA MathFest in Aug. 2023
- **AMC 12:** 3rd place, top 5% honor roll (score 120/150), Certificate of Achievement for students in 10th grade or below, Certificate of Distinction, 2023 (8th grade)
- **AMC 10:** Top 1% distinguished honor roll, Certificate of Achievement for students in 8th grade or below, Certificate of Distinction, 2022 (7th grade); top 5% Honor Roll, Certificate of Achievement for students in 8th grade or below, Certificate of Distinction, 2021 (6th grade)
- **AMC 8:** 1st place with perfect score (25/25), 2024; Top 1% distinguished honor roll (2022,2023,2024); top 5% honor roll & Certificate of Achievement for students in 6th grader or below (2019 4th grade and 2020 5th grade)
- Qualifications for Math Prize for Girls Competition at MIT, Awesome Math Camp (Algebra 2.5 Certificate), 2023
- **Math Kangaroo:** 7th grade division, ranked state #1 and national #7, March 2023
- **Math and AI 4 girls:** honorable mention 2022, 2023

Computer Science/Robotics/Physics

- **USACO** (USA Computer Olympiad) Silver Division (promoted to silver with full score), Feb 2023
- **ACSL** (American Computer Science League) junior division finalist, May 2023
- **MakeX Robotics Competition North America Open**, 2nd runner-up (team leader), 2021
- **F=ma exam** (physics competition for USAPHO): Participation certificate (score 10/25) Feb 2023

STEM Research

- Program skills: Scratch, Python, Java, R, Matlab, mBlock, MIT App Inventor
- **MCM (Mathematical Contest in Modeling)** participation certificate: Team with 2 high school students (Team 2322194) submitted a research paper of “2023 MCM Problem C: Predicting Wordle Results Solution” to MCM (a math modeling contest that is open to college students or below), Feb 2023

- Completed a **data mining project**: Deciphering the Determinants of Crime Rates - A Lasso Region Analysis of Socio-Economic Factors, June 2023, updated Feb. 2024.
- Collaborated with 4 students remotely for research: “High-capacity color barcode with wavelet-based embedding and denoise functions,” and co-author for poster “Enhancing data capacity in color QR codes with wavelet-based steganography and denoise algorithms,” presented in **Joint Mathematics Meeting** for American Mathematical Society (AMS) Jan 2024.

Music

- Multi-instrumentalist: Started to learn piano at 5, violin at 6, and later switched to cello at 11. At school, I also learned how to play the recorder, clarinet, and ukulele.
- **Piano**: Royal Conservatory of Music piano level 8; Performed 5 times at Carnegie Hall as an international competition winner. Special Plaque Sonatina Medal from National Guild of Piano Teachers (Featured in U.S.A. National Guild Notes Magazine honor section) 2022; Elite International Music Competition 1st place 2023, 2019, 2nd place 2022, 2021, 2018, 2019 New York Celebration of Excellence winner; 2017 Connecticut music festival 3rd place
- **Violin**: Selected for Ridgefield All Elementary School Music Festival in 2020; violin section leader in school 6th-grade orchestra (2021 fall); Ridgefield middle school symphonic orchestra (2021 fall)
- **Cello**: Cello section leader and soloist in school orchestra (spring 2022-present); cellist for Ridgefield Middle School Symphonic Orchestra (2022-present) and Chamber Orchestra (2023-present), Western Connecticut Youth Orchestra (2022-present), and Community Cello Ensemble (Sep.2023-present); selected to play cello in Western Connecticut Middle School Regional Music Festival (ranked #4 in the cellists selected from 30+ middle schools), March 2023 and will play in March 2024; Connecticut Fairfield County Fantastic Festival 1st place - platinum group award (cellist in Ridgefield middle school symphonic orchestra) 2022, 2023

Visual Arts

- Scholastic Art and Writing Competition CT Regional Scholastic Silver Key Art Awards for watercolor painting: “Resilient Companions”, and fashion design: “Metamorphosis”, Jan. 2024
- Acrylic painting: “Silent Woods” selected to be published at “Celebrating Art” in 2024
- Submitted art for 2023 -2024 Connecticut Recycling Billboard Contest, Nov. 2023
- Huaxia Cup Calligraphy and Painting Competition, 3rd place 2020, 2021; Outstanding Award 2022

Language

- English, Chinese, Spanish, Basic French
- Huaxia Chinese School Chinese speech competition, 3rd place, 2018
- Published Chinese article “my summer holidays” in Huaxia Garden Journal No. 3, Oct. 2020
- Published Chinese article “after entering middle school” in Huaxia Garden Journal No.16, March 2022
- The 3rd Huaxia Cup Online Chinese Knowledge Competition, 2nd place, 2022
- Submitted 3 English essays for Scholastic Art and Writing Competition, Dec 2023

Community Services

- Founded a **Capstone Project** of kids coding education: teaching Scratch to the local kids, Sep. 2023 - present
- **Assistant Coach** and volunteer for Youth Innovation Lab under director Mr. David Peng (made coding templates; demonstrate coding algorithm in group meetings; assistant coach for coding competition) June 2023 - present
- **Cellist** in Community Cello Ensemble under Dr. Chungsun Kim, Sep. 2023- present
- **President’s Volunteer Service Gold Award** (Jan. 2024) for volunteer work in Community Cello Ensemble and Youth Innovation Lab
- **President’s Volunteer Service Bronze Award** (2023) from Piano Village Foundation under Ms. Felicia Zhang (designed digital art illustrations for piano books and flyers, community piano performances, volunteered for piano events, etc., since elementary school years)
- **Appreciation Certificate** from Connecticut Music Teacher Association (convert historical Connecticut music recital records into digital files), 2022
- Volunteer for East Ridge Middle School library, 2021-present
- Member of Ridgefield Boys and Girls Club - Torch Club, and Ms. President US in Ridgefield, CT 2021-2022
- Online teaching on solving Rubik’s cubes in Huaxia Chinese School in Connecticut, 2021 summer
- Member of Girl Scouts in elementary school years