CHRISTINE YE

EDUCATION

Eastlake High School (GPA: 4.0) *2018-2022*
Relevant Coursework & Scores: AP Computer Science Principles (5), AP Physics 1 (5), AP Chemistry (5), AP Physics 2 (5), AP Physics C Mechanics (5), AP Physics C E&M (5), AP Computer Science A (5), AP Calculus BC (5), AP World History (5), AP Biology, AP Statistics, AP English Language & Composition, Data Structures
Activities: Science Olympiad, National Honor Society, Science National Honor Society, Math National Honor Society, Astronomy Club, Research Club, Link Crew

Central Washington University (GPA: 4.0) *2020-2022*
Relevant Coursework: Multivariable Calculus I/II, Linear Algebra

SCIENCE OLYMPIAD EXPERIENCE

National Medals 2018
National bronze medalist in Dynamic Planet and Meteorology, 12th place in Fast Facts, most decorated member of Evergreen national team.

State Medals 2017, 2018
State gold medalist in Dynamic Planet, silver medalist in Meteorology.

Division C Regional Medals 2019-Present
2x gold medalist in Astronomy, gold & bronze medalist in Dynamic Planet, bronze medalist in Chem Lab, most decorated member of team.

Team Awards 2015-Present
Evergreen team placed 2nd (2017) and 1st (2018) in state, Eastlake team qualified in 2021.

Event Participation 2016-Present
6x Dynamic Planet, 3x Astronomy, 2x Meteorology, 2x LEAF Challenge, 2x Fast Facts, 2x Chem Lab, Forensics, Experimental Design, Write It Do It, Code Busters.

OUTREACH AND LEADERSHIP EXPERIENCE

Girls Rock in Science and Math (est. 2012) Vice President

Organize GRISM's summer programs, focusing on hands-on activities including labs, engineering challenges, and programming. Lead facilitator and curriculum writer for GRISM's year-round programs: bi-weekly STEM instruction for girls grades 3-5 (GRISM), bi-weekly STEM seminars and discussions for girls grades 6-8 (GRASS), and annual STEM competition for grades 3-5 (GEMS). Developed virtual seminar series featuring prominent women in STEM.

Eastlake Astronomy Club President

Organize bi-monthly club meetings, with interactive activities as well as interesting lectures. Spearhead community outreach events as part of NASA's Night Sky Network.

Eastlake Research Club Co-Founder and President

Creating a formal research program at Eastlake, with mentoring, project development, competition prep, and science fair support for students.

NANOGrav Space Public Outreach Team

Delivering interactive and relevant talks on the search for gravitational waves, supermassive black holes, and pulsars on behalf of a collaboration of 100+ professional scientists.

NANOGrav talk at Cascadia College	Feb '21
Multi-Messenger Astronomy Talks at Eastside Preparatory School (2)	Jan '21
Seminar at Redmond STEM Center	Dec '20
Interview with Young Scientists Journal	Sep '20
Interview with Spaced Out Podcast - Black Holes	Sep '20
Interview with Drop the STEM Podcast	Jul '20
AI+astrophysics talk at UW AI4All	Jul '20
Gravitational waves talk at Sammamish Teen Science Cafe	Jun '20

RESEARCH EXPERIENCE

CIERA Research Intern Oct '20 - Present
Northwestern University

Intern at Northwestern's Center for Interdisciplinary Exploration and Research in Astrophysics with Dr. Maya Fishbach. Studying the use of 3rd generation gravitational wave detectors for standard siren cosmology and astrophysics.

KIPAC Research Intern Jun '20 - Oct '20
Stanford University

Intern at the Kavli Institute for Particle Astrophysics and Cosmology at Stanford with Dr. Philip Mansfield. Studied artificial flattening of satellite planes in numerical simulations.

NANOSTART Summer Intern May -Aug '20
NANOGrav Collaboration

Summer intern with NANOGrav and UW Gravitational Waves Research Experience for Undergraduates (REU). Continuing work on pulsar glitches and rotating radio transients.

Gravitational Waves Researcher May '19 - Present
University of Washington

Student researcher under Dr. Joey Key's Gravitational Wave Astronomy research group. Participate in NANOGrav undergraduate program, Pulsar Search Collaboratory, individual research projects.

PUBLICATIONS

Ye, C. and Fishbach, M. *Cosmology with Standard Sirens at Cosmic Noon*. arXiv:2103.14038, submitted to Physical Review D.

Ye, C. *Surveys of Substructure in Pulsar Glitches and Glitching Pulsars.* American Astronomical Society meeting #236, id. 133.4. Bulletin of the American Astronomical Society, Vol. 52, No. 3., 2020

Ye, C. *Characterizing RFI in Pulsar Search Data.* American Astronomical Society meeting #235, id. 102.17. Bulletin of the American Astronomical Society, Vol. 52, No. 1., 2020.

RESEARCH TALKS

NANOSTARs Student Talk Apr '21

(Invited) Cosmic Explorer Consortium Seminar Apr '21

UW Bothell Undergraduate Research Symposium Mar '21

(Invited) Accelerated AI for Big Data Experiments, NCSA@Illinois Oct '20

American Association for the Advancement of Science Meeting Feb '20

UW Bothell Undergraduate Research Symposium Dec '19

Washington State Academy of Science Annual Symposium Sept '19

RESEARCH ACHIEVEMENTS

National 3rd Place and WA Junior Science and Humanities Symposium Winner Feb '21
Top project in Washington State and 3rd nationally, $6000 scholarship.

Finalist, Regeneron International Science and Engineering Fair May '19, '20, '21
Finalist representing Washington, at the world's largest pre-college science competition.

Gold Medallion Grand Champion, Washington State SEF Mar '20, '21
2x top award winner at state science fair out of 400+ projects.

American Junior Academy of Science Lifetime Fellow Feb '20, '21

$1500 Special Award Winner, Intel International Science and Engineering Fair May '19

Grand Champion with Distinction, Central Sound Regional SEF Mar '19, 20, '21

EXTRA-CURRICULAR ACTIVITIES

Vaganova/Russian Ballet Pre-Professional Division

Train and rehearse under an advanced Vaganova-based Russian ballet curriculum. Perform major roles in bi-annual productions such as *The Nutcracker* and *Don Quixote*.

Classical Piano & Violin

Trained extensively in violin and piano technique, advanced repertoire, music theory, and chamber/orchestra playing.

Baking

Just for fun. My favorite treat to make is lemon bars.