

CHER SCARLETT

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EDUCATION

2026 **ORANGE COAST COLLEGE** GPA: 4.0

May | A.S., Physics, Mathematics, Astronomy, & Earth Science; A.A. Liberal Arts

2024 **Extracurriculars:** Honors Program, Astronomy Club (*Treasurer*), STEM Club (*Outreach Manager*), MESA, EOPS, Math & Science Club (*President*), $\Phi\Theta\Kappa$ (*Phi Theta Kappa*),
January Simulating Extreme Spacetimes (SXS) group
Professional Memberships: Institute of Physics, Society of Physics Students, American Physical Society, American Meteorological Society, American Geophysical Union, American Mathematical Society

Includes enrollment at other California Community Colleges.

SKILLS

Python | Java | Groovy | Ruby | PHP | C | JavaScript | CSS | HTML | IDL | Fortran
LaTeX | Mathematica | MATLAB | Jupyter Notebooks | AstroImageJ | ArcGIS | PyTorch

RESEARCH EXPERIENCES

2026 **CUESTA COLLEGE**

Advisor: Dr. James Eickemeyer

2025 **INSTITUTE FOR STUDENT ASTRONOMICAL RESEARCH (INSTAR)**

Las Cumbres Observatory (LCO) Network

Astronomy Research Seminar | Advisor: Dr. Rachel Freed

2025 **NASA JET PROPULSION LABORATORY (NASA-JPL)**

NASA Juno Mission

Analysis and Archiving of Near- and Mid-Infrared Observations of Outer Planet Atmospheres

Planetary and Exoplanetary Atmospheres Group

Student Independent Research Internship (SIRI) | Advisor: Dr. Glenn S. Orton

2025 **CALIFORNIA INSTITUTE OF TECHNOLOGY (CALTECH)**

| *NASA-JPL Lunar Trailblazer Mission*

2024 *Planetary Sciences Department*

Research Assistant, Science Communication Intern | Advisor: Dr. Bethany Ehlmann

2025 **ORANGE COAST COLLEGE**

Compact Objects and Gravitational Waves | Independent Study | Advisor: Prof. Jessica Asbell

ACADEMIC & WORKSHOP EXPERIENCES

2025 **NASA AI/ML SCIENCE AND TECHNOLOGY INTEREST GROUP**

PyTorch and Auto Differentiation Lecture

2025 **COMPUTATIONAL RESEARCH ACCESS NETWORK | BRYN MAWR | NSF**

Computational Research Methods for Plasma Physics & Sciences Virtual Seminar

Magnetohydrodynamics with FLASH, Monte Carlo Method, & Particle-in-Cell Tracks

- 2024 UNIVERSITY OF ILLINOIS | GRAVITY THEORY TRUST**
EFTs, Gravity, and Fluid Dynamics: Progress, Challenges, and Emerging Opportunities Workshop
- 2024 CALTECH | NASA EXOPLANET SCIENCE INSTITUTE (NEXSCI)**
Sagan Exoplanet Summer Workshop
Advances in Direct Imaging: From Young Jupiters to Habitable Earths
- 2024 MIAMI UNIVERSITY | NSF | EARTHSCOPE CONSORTIUM**
Seismology Skill Building Workshop
- 2024 QUEEN'S UNIVERSITY | CERN**
The 6th Summer Particle Astrophysics Workshop (EIEIOO)
- 2024 ARIZONA STATE UNIVERSITY | NASA**
Lucy Student Pipeline Accelerator and Competency Enabler (L'SPACE) Academy
NASA Proposal Writing and Evaluation Experience (NPWEE)
- 2024 NASA**
NASA Community College Aerospace Scholars (NCAS)
- 2003 FRED HUTCHINSON CANCER CENTER | UNIVERSITY OF WASHINGTON**
HutchLab | High School Human Genome Project

OBSERVATION EXPERIENCES

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|-------------|--|-----------------------------|
| 2025 | Caltech Palomar Observatory - Hale Telescope
<i>4 nights; 5.1 m; 1 - 2.5 μm (PHARO)</i>
<i>Observing Jupiter in Support of Juno Mission (NASA-JPL)</i> | <i>Palomar Mountain, CA</i> |
| 2025 | Las Cumbres Observatory (LCO) - Teide Observatory
<i>2 nights; 0.35 m; 0.4 - 0.7 μm (QHY600)</i>
<i>Astrometry of double stars</i> | <i>Tenerife, ES</i> |
| 2025 | LCO - South African Astronomical Observatory
<i>1 nights; 0.35 m; 0.4 - 0.7 μm (QHY600)</i>
<i>Astrometry of double stars</i> | <i>Sutherland, ZA</i> |
| 2025 | NASA Infrared Telescope Facility (IRTF)
<i>8 nights; 3.2 m; 0.8 - 5.3 μm (SPEX & MIRSI)</i>
<i>Observing Jupiter in Support of Juno Mission</i> | <i>Mauna Kea, HI</i> |
| 2025 | Lockheed Martin Ignite Ground System (IGS)
<i>4 nights; 8-9 kHz</i>
<i>Monitoring for Lunar Trailblazer (LTB) Signal</i> | <i>Waterton, CO</i> |
| 2025 | Fukui University of Technology (FUT) Awara Space Center
<i>2 nights; 8-9 kHz</i>
<i>Monitoring for Lunar Trailblazer (LTB) Signal</i> | <i>Fukui, JP</i> |
| 2025 | Australia Telescope National Facility
<i>6 nights; 8-9 kHz (Mopra)</i>
<i>Monitoring for Lunar Trailblazer (LTB) Signal</i> | <i>New South Wales, AU</i> |

EMPLOYMENT EXPERIENCES

2025 ORANGE COAST COLLEGE PLANETARIUM *Costa Mesa, CA*
May Presenter
|
2024
May

TEACHING & TUTORING

2025 EARTHSOPE CONSORTIUM | MIAMI UNIVERSITY *Miami, OH*
September Teaching Assistant
|
May Seismology Skill Building Workshop

2018 UNIVERSITY OF WASHINGTON *Seattle, WA*
May Adjunct Instructor
|
January Introductory Web Development (Extension)

ENGINEERING

2023 CONTROLZEE, INC *San Jose, CA*
April Senior Software Engineer
|
2022
March

2021 APPLE, INC *Cupertino, CA*
November Principal Software Engineer, Global Security Tools
|
2020
April

2020 WEBFLOW *San Francisco, CA*
April Senior Software Engineer, Design System & Core Engine
|
2019
April

2019 STARBUCKS COFFEE COMPANY *Seattle, WA*
April Lead Software Engineer, Web & Mobile
|
2017
November

2017 WORLD WIDE TECHNOLOGY *St. Louis, MO*
August Senior Software Engineer
|
2016
August

2016 ACTIVISION BLIZZARD *Irvine, CA*
August Software Engineer, Web & Mobile
|
2015
August

2015 <i>August</i>	USA TODAY <i>Senior Developer, New and Emerging Technologies</i>	<i>McLean, VA</i>
2011 <i>November</i>	NEUTRINO, INC <i>Front End Developer</i>	<i>Seattle, WA</i>
2008 <i>January</i>	LUXURYREALESTATE.COM <i>Front End Developer</i>	<i>Seattle, WA</i>
2007 <i>May</i>		

VOLUNTEER EXPERIENCES

2021 <i>October</i> <i>present</i>	COWORKER SOLIDARITY FUND <i>Committee Member</i>	<i>Annapolis, MD</i>
2025 <i>October</i>	COMPUTATIONAL RESEARCH ACCESS NETWORK <i>Teaching Assistant</i>	<i>Fullerton, CA</i>
2025 <i>April</i>	MESA STEM DAY <i>Workshop Assistant</i>	<i>Newport Beach, CA</i>
2024 <i>December</i>	MESA CAMPUS COUNCIL <i>Panelist</i>	<i>Newport Beach, CA</i>
2024 <i>November</i>	DEMOCRATIC NATIONAL COMMITTEE <i>Phone Bank Operator</i>	<i>Washington, DC</i>
2024 <i>October</i>	NEWPORT-MESA COLLEGE & CAREER FAIR <i>Booth Operator for Coastline College & MESA</i>	<i>Costa Mesa, CA</i>
2024 <i>September</i>	EXPLORE CALTECH <i>Booth Operator for Pasadena City College Physics & Astronomy</i>	<i>Pasadena CA</i>
2024 <i>May</i>	BOLSA CHICA CONSERVANCY <i>Invasive Species Removal</i>	<i>Huntington Beach, CA</i>
2024 <i>May</i>	SAN DIEGO COAST KEEPER <i>Water Quality Testing</i>	<i>San Diego, CA</i>
2023 <i>August</i>	SURFRIDER FOUNDATION <i>Beach Cleanup</i>	<i>San Clemente, CA</i>
2015 <i>August</i>	ORANGE COUNTY PROBATION DEPARTMENT <i>At-risk youth mentor (OC GRIP)</i>	<i>Santa Ana, CA</i>

2015 MINDMAKERS
August Youth mentor & web developer

Pasadena, CA

AWARDS & SCHOLARSHIPS

2025	COASTLINE COLLEGE <i>President's List (Fall)</i>	<i>Fountain Valley, CA</i>
2025	SANTA BARBARA CITY COLLEGE <i>President's List (Fall)</i>	<i>Santa Barbara, CA</i>
2025	WOMEN'S INDEPENDENCE SCHOLARSHIP PROGRAM <i>Doris Buffett Independence Scholar</i>	<i>Wilmington, NC</i>
2025	AMERICAN INSTITUTE OF PHYSICS <i>TEAM-UP Together Scholar</i>	<i>College Park, MD</i>
2025	COASTLINE COLLEGE <i>Honor's List (Summer)</i>	<i>Fountain Valley, CA</i>
2025	ORANGE COAST COLLEGE <i>Garrison Fellow</i>	<i>Costa Mesa, CA</i>
2025	COMMUNITY COLLEGE LEAGUE OF CALIFORNIA <i>All-California Academic Award, First Team</i> <i>(unordered top 20 students)</i>	<i>Sacramento, CA</i>
2025	COASTLINE COLLEGE FOUNDATION <i>Associated Student Government Career & Technical Merit Scholarship</i>	<i>Fountain Valley, CA</i>
2025	COASTLINE COLLEGE FOUNDATION <i>Herman Tate Endowment</i>	<i>Fountain Valley, CA</i>
2025	JEANNETTE RANKIN FOUNDATION	<i>Athens, GA</i>
2024	<i>Jeannette Rankin National Scholar</i>	
2025	NATIONAL SCIENCE FOUNDATION	<i>Alexandria, VA</i>
2024	<i>S-STEM Scholar (Coastline College)</i>	
2024	COASTLINE COLLEGE <i>Honor's List (Fall)</i>	<i>Fountain Valley, CA</i>
2024	ORANGE COAST COLLEGE FOUNDATION <i>Peter Christian Hernandez Memorial Scholarship Award</i>	<i>Costa Mesa, CA</i>
2024	ORANGE COAST COLLEGE <i>Honor's List (Spring)</i>	<i>Costa Mesa, CA</i>
2024	GOLDEN WEST COLLEGE <i>Honor's List (Spring)</i>	<i>Huntington Beach, CA</i>

Developer Defying Patriarchy (While Being an Awesome Developer)
(Runner-up)

PUBLICATIONS

Scarlett, C. (2025). Lunar Trailblazer Interactive Model [Computer software]. *California Institute of Technology*.
<https://trailblazer.caltech.edu/spacecraft/index.html>

Scarlett, C. (2025). Water into Doom: Balancing AI with Climate Action & Environmental Costs at the Water-Energy Nexus. *The Honors Transfer Council of California Building Bridges Research Conference*.

Scarlett, C. (2025). Emmy Noether: A Woman on the Edge of [Space]Time. *Academia*.
https://www.academia.edu/144259985/Emmy_Noether_A_Woman_on_the_Edge_of_Space_Time

Scarlett, C. (2024). Remote seismology correlation and Mount St. Helens volcanology. *Seismology Skill Building Workshop*.
https://nbviewer.org/urls/www.iris.edu/hq/files/short_courses/2020/ssb/mt-rainier-seismicity.ipynb

Scarlett, C. (2024, July 29). *A case of the blues: Is Overexposure to Artificial Light Causing a Mental Health Crisis?*. Esri. <https://storymaps.arcgis.com/stories/e236a32458bb4b7db87171f6a0305d8a>

Carlson, G., Roginsky, J., & Scarlett, C. (2022, February 6). Washington can be a leader on protecting sexual harassment, assault survivors. *The Olympian*.
<https://www.theolympian.com/opinion/op-ed/article258066068.html>

Scarlett, C. (2019, March 12). Creating a Spotify-powered app using Nuxt.js. *Smashing Magazine*.
<https://www.smashingmagazine.com/2019/03/spotify-app-vue-nuxt-javascript/>

Scarlett, C. (2008). sIFRvault [Computer software].