

# CHER SCARLETT

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## EDUCATION

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- 2026 **ORANGE COAST COLLEGE** GPA: 4.0  
*May* A.S., Physics, Mathematics, Astronomy, & Earth Science; A.A. Liberal Arts  
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2024 **Extracurriculars:** Honors Program, Astronomy Club (*Treasurer*), STEM Club (*Outreach Manager*), MESA, EOPS, Math & Science Club (*President*), ΦΘΚ (*Phi Theta Kappa*), Simulating Extreme Spacetimes (SXS) group  
**Professional Memberships:** Institute of Physics, Society of Physics Students, American Physical Society, American Meteorological Society, American Geophysical Union

*Includes enrollment at Santa Barbara City College and Coast Community College District schools.*

## SKILLS

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

## RESEARCH EXPERIENCES

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- 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

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

# EMPLOYMENT EXPERIENCES

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2025	<b>ORANGE COAST COLLEGE PLANETARIUM</b>	<i>Costa Mesa, CA</i>
<i>May</i>	<i>Presenter</i>	
2024		

## TEACHING & TUTORING

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2025	<b>EARTHSCOPE CONSORTIUM   MIAMI UNIVERSITY</b>	<i>Miami, OH</i>
<i>September</i>	<i>Teaching Assistant</i>	
	<i>Seismology Skill Building Workshop</i>	
<i>May</i>		
2018	<b>UNIVERSITY OF WASHINGTON</b>	<i>Seattle, WA</i>
<i>May</i>	<i>Adjunct Instructor</i>	
	<i>Introductory Web Development (Extension)</i>	
<i>January</i>		

## ENGINEERING

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2023	<b>CONTROLZEE, INC</b>	<i>San Jose, CA</i>
<i>April</i>	<i>Senior Software Engineer</i>	
2022		
<i>March</i>		
2021	<b>APPLE, INC</b>	<i>Cupertino, CA</i>
<i>November</i>	<i>Principal Software Engineer, Global Security Tools</i>	
2020		
<i>April</i>		
2020	<b>WEBFLOW</b>	<i>San Francisco, CA</i>
<i>April</i>	<i>Senior Software Engineer, Design System &amp; Core Engine</i>	
2019		
<i>April</i>		
2019	<b>STARBUCKS COFFEE COMPANY</b>	<i>Seattle, WA</i>
<i>April</i>	<i>Lead Software Engineer, Web &amp; Mobile</i>	
2017		
<i>November</i>		
2017	<b>WORLD WIDE TECHNOLOGY</b>	<i>St. Louis, MO</i>
<i>August</i>	<i>Senior Software Engineer</i>	
2016		
<i>August</i>		
2016	<b>ACTIVISION BLIZZARD</b>	<i>Irvine, CA</i>
<i>August</i>	<i>Software Engineer, Web &amp; Mobile</i>	
2015		
<i>August</i>		

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

## VOLUNTEER EXPERIENCES

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

2015 **MINDMAKERS**  
August *Youth mentor & web developer*

Pasadena, CA

## AWARDS & SCHOLARSHIPS

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

## PUBLICATIONS

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