

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*), 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

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

VOLUNTEER EXPERIENCES

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