CHER SCARLETT

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EDUCATION

2026 CALIFORNIA COMMUNITY COLLEGES

GPA: 4.0

May Santa Barbara City College | Associate in Science, Physics | Coastline College | Associate in Science, Mathematics

2023 Orange Coast College | Associate in Science, Astronomy & Earth Science

August

Honors Program, Astronomy Club (*Treasurer*), STEM Club (*Outreach Manager*), MESA, EOPS, Math & Science Club (*President*), $\Phi\Theta K$ (*Phi Theta Kappa*), Society of Physics Students, American Physical Society, American Meteorological Society, American Geophysical Union

SKILLS

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

RESEARCH EXPERIENCES

2025 INSTITUTE FOR STUDENT ASTRONOMICAL RESEARCH (INSTAR)

Las Cumbres Observatory (LCO) Network
Astronomy Research Seminar - Double Star Astrometry | Advisor: Dr. Rachel Freed

2025 NASA JET PROPULSION LABORATORY (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 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

2025 Caltech Palomar Observatory - Hale Telescope

Palomar Mountain, CA

2 nights; 5.1 m; 1 - 2.5 μm (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 μm (QHY600) Astrometry of double stars

2025 LCO - South African Astronomical Observatory

Sutherland, ZA

1 nights; 0.35 m; 0.4 - 0.7 μm (QHY600) Astrometry of double stars

2025 NASA Infrared Telescope Facility (IRTF)

Mauna Kea, HI

4 nights; 3.2 m; 0.8 - 5.3 µm (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

2025 ORANGE COAST COLLEGE PLANETARIUM

Costa Mesa, CA

May Presenter

2024

May

TEACHING & TUTORING

2025	EARTHSCOPE CONSORTIUM MIAMI UNIVERSITY	Miami, OH
September	Teaching Assistant	
June	Seismology Skill Building Workshop	
2018	UNIVERSITY OF WASHINGTON	Seattle, WA
May	Instructor	
January	Introductory Web Development	

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	USA TODAY	McLean, VA
August 	Senior Developer, New and Emerging Technologies	
2011		
November		

2011 NEUTRINO, INC Seattle, WA November Front End Developer 2008 January 2008 LUXURYREALESTATE.COM Seattle, WA January Front End Developer 2007 May VOLUNTEER EXPERIENCES **COWORKER SOLIDARITY FUND** Annapolis, MD October Committee Member 2025 COMPUTATIONAL RESEARCH ACCESS NETWORK Fullerton, CA October Teaching Assistant 2025 MESA STEM DAY Newport Beach, CA April Workshop Assistant 2024 MESA CAMPUS COUNCIL Newport Beach, CA December Panelist 2024 DEMOCRATIC NATIONAL COMMITTEE Washington, DC November Phone Bank Operator 2024 NEWPORT-MESA COLLEGE & CAREER FAIR Costa Mesa, CA October Booth Operator for Coastline College & MESA Pasadena CA 2024 EXPLORE CALTECH September Booth Operator for Pasadena City College Physics & Astronomy 2024 BOLSA CHICA CONSERVANCY Huntington Beach, CA May Invasive Species Removal 2024 SAN DIEGO COAST KEEPER San Diego, CA May Water Quality Testing 2023 SURFRIDER FOUNDATION San Clemente, CA August Beach Cleanup

2015 ORANGE COUNTY PROBATION DEPARTMENT

August At-risk youth mentor (OC GRIP)

Santa Ana, CA

August Youth mentor & web developer

2007 LIVEFEED

St. Louis, MO

January Web developer

AWARDS & SCHOLARSHIPS

2025	AMERICAN INSTITUTE OF PHYSICS TEAM-UP Together Scholar	College Park, MD
2025	ORANGE COAST COLLEGE Garrison Fellow	Costa Mesa, CA
2025	COMMUNITY COLLEGE LEAGUE OF CALIFORNIA Phi Theta Kappa All-California Academic Award, First Team	Sacramento, CA
2025	COASTLINE COLLEGE FOUNDATION Associated Student Government Career & Technical Merit Scholarship	Fountain Valley, CA
2025	COASTLINE COLLEGE FOUNDATION Herman Tate Endowment	Fountain Valley, CA
2025 2024	JEANNETTE RANKIN FOUNDATION Jeannette Rankin National Scholar	Athens, GA
2025 2024	NATIONAL SCIENCE FOUNDATION Coastline College: Science, Technology, Engineering, & Math Scholar	Alexandria, VA
2024	ORANGE COAST COLLEGE FOUNDATION Peter Christian Hernandez Memorial Scholarship Award	Costa Mesa, CA
2022	HACKER NOON Developer Defying Patriarchy (While Being an Awesome Developer) (Runner-up)	Edwards, CO

PUBLICATIONS

Lunar Trailblazer Interactive Model. (2025). *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. (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*.

 $\underline{https://www.theolympian.com/opinion/op-ed/article258066068.html}$

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/