# CHER SCARLETT

hello@cher.dev | linkedin.com/in/cherscarlett | cher.dev

## **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 Sciences

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             |             |

## **E**NGINEERING

| 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<br>  | Lead Software Engineer, Web & Mobile                  |                   |
| 2017       |   |                   |
| November   |   |                   |
| 2017       | WORLD WIDE TECHNOLOGY                                 | St. Louis, MO     |
| August<br> | Senior Software Engineer                              |                   |
| 2016       |   |                   |
| August     |   |                   |
| 2016       | ACTIVISION BLIZZARD                                   | Irvine, CA        |
| August<br> | Software Engineer, Web & Mobile                       |                   |
| 2015       |   |                   |
| August     |   |                   |
| 2015       | USA TODAY   | McLean, VA        |
| August<br> | 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<br>2024 | JEANNETTE RANKIN FOUNDATION  Jeannette Rankin National Scholar                                   | Athens, GA          |
| 2025<br>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         |

## **P**UBLICATIONS

Lunar Trailblazer Interactive Model. (2025). *California Institute of Technology*. <a href="https://trailblazer.caltech.edu/spacecraft/index.html">https://trailblazer.caltech.edu/spacecraft/index.html</a>

- 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/