

Charlie Chesney

Santa Cruz, CA - cmchesne@ucsc.edu - linkedin.com/in/charliechesney/

EDUCATION

University of California, Santa Cruz - PhD Environmental Studies, *Sept '20-June '25*

University of Oxford - MSc Biodiversity, Conservation & Management, *Oct '17-Sept '18*

San Francisco State University - BSc Biology/Zoology, *Aug '11-May '15*

RESEARCH, TEACHING & MENTOR EXPERIENCE

Graduate Student Mentor; UC Santa Cruz - *Winter Quarter '22 - Present*

- Teaches research methodologies to 3 undergraduate students with 100% retention rate
- Guides 2 independent undergraduate student research projects
- Collaborates with 1 undergraduate art student to create scientific illustrations

Salton Sea Management Program; UCSC - Graduate Student Researcher, *July '21-March '22*

- Analyzed water importation proposals for social and environmental impacts
- Provided background research on the ecology, hydrology, surrounding communities, and the region's developing lithium industry

CRSN-151b Sustainability Innovation; UC Santa Cruz - TA, *Fall Quarter '20*

- Helped refine presentation slides and quarter schedule, created & facilitated icebreakers
- Communicated homework assignments, held office hours, & assigned grades
- Coordinated & co-facilitated NSF I-Corps workshops

Drawdown Bay Area; Remote - Research Coordinator, *Aug '20-Oct '20*

- Trained & managed 4 Research Associates in creating the Bay Area Climate Action Map

Climate Corps Fellow at Earth Team; Richmond, CA - Program Associate, *Oct '19-Aug '20*

- Created & taught watershed, climate, STEM career & sustainability curriculum to 2 teams of 14 youth at Title 1 high schools
- Guided youth through restoration, research & community outreach projects: art fair, award-winning social media campaigns, & virtual board game design

ESGINE; Oxford, UK - Sustainability Research Analyst, *June '18-Jan '19*

- Analyzed industry impacts on the Sustainable Development Goals
- Analyzed stock market sustainability indices methodologies
- Compiled machine learning corpus for sustainability analytics algorithm

Using Smart Contracts to Attract Conservation Investment; University of Oxford - MSc student advised by Dr. Paul Jepson, *May '18-Sept '18*

- Researched possibilities & limitations of blockchain technology for nature conservation
- Conducted 11 informal & 11 semi-structured interviews using snowball sampling
- Developed model "Herd Token" blockchain smart contract for rewilding investment

Wellness & Conservation Center; San Francisco Zoo, CA - Student Researcher, *Feb '14-May '15*

- Became the first student researcher at the Wellness & Conservation Center
 - Recruited & trained 2 students in animal behavior data collection protocols
 - Managed student team on 3 simultaneous projects
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OTHER EXPERIENCE

Fake Nature - Personal Project, *June '17-Present (intermittent)*

- Developed natural language processing algorithm to generate nature documentary scripts & wildlife "facts" shared through a Twitter bot
- Created robotic "Spy Duck" prototype to remotely film waterfowl

Other Innovation Projects - Project Leads, *Jan '18-Oct '19*

- Led product design for start-up projects relating to time management (KanPlan Board), carbon offsetting app (NeuTreeLize), & blockchain-based investment platform (Wild-SCIP)

Manav Sadhna; Ahmedabad, Gujarat, India - Volunteer, *June '17-July '17*

- Worked with organization to conduct health checks on women and children

Livermore Area Recreation & Parks District; CA - Living Arroyos Intern, *Jan '17-June '17*

- Led restoration volunteer days of 20+ participants
- Conducted biodiversity surveys, mitigation & restoration activities

Ventana Wildlife Society; Big Sur, CA - California Condor Intern, *Feb '16-Aug '16*

- Co-managed field site & trained new intern on protocols
- Monitoring, tracking & behavior observations, animal handling & husbandry

Yellowstone National Park; WY - Raptor Migration Counter, *Sept '15-Oct '15*

- Collected raptor migration data for duration of migration season

Graduate Research; SF State University - Undergraduate Research Assistant, *Feb '14-May '15*

- Helped graduate students collect data in the field relating to avian west Nile virus in White-crowned Sparrows and “Zombees” in European Honey Bees

La Suerte Biological Research Station; Costa Rica - Field Primate Behavior Student, *July '14*

- Learned tracking and monitoring skills in rainforest ecosystem
- Independent research project on hand-use in White-faced Capuchins

INFORMAL SCIENCE COMMUNICATION

Climate Action Market; UCSC Seymour Marine Discovery Center - Loik Lab Booth, *April '22*

- Explained and demonstrated thesis research to attendees

Science & Us; Remote - Participant & Mentor, *July '20-Present (intermittent)*

- Created podcast episode on zoonotic disease with high school student located in India

The Feedback Project; Remote - Researcher & Editor, *June '20-Present (intermittent)*

- Researched racism embedded in feedback loops related to food & environmental justice
- Wrote & edited educational website pages
- Advise 2 female undergraduates on research topic selection & edit blog articles

Panda Labs, World Wildlife Fund; Remote - Blockchain Specialist, *March '19-Aug '20*

- Facilitated the collaboration between World Wildlife Fund, Ecosulis & Oxford
- Researched & wrote report on emerging blockchain uses for the environment

Science Through Story - Workshop Attendee, *Feb '20*

Titans of Nuclear Podcast; Remote - Note Taker, *Aug '19-Nov '19*

- Summarized episodes, defined acronyms & clearly explain complex, technical topics

BCM Podcast; University of Oxford - Co-Creator & Co-Host, *Nov '17-April '18*

North Livermore BioBlitz; Livermore, CA - Organizer & Guest Teacher, *July '17*

- Worked with community groups to organize BioBlitz to encourage community members to explore newly designated preserve
- Guest taught 4th grade science class about local biodiversity & led them in creating their own field identification notebooks

[Popular Science Publications](#) & [Personal Blog](#)

FORMAL PRESENTATIONS

Energy & Sustainability Career Panel, San Mateo County Community College District, *May '22*

Living Solar Panels: Toward Opuntia-based Electricity, Graduate Research Symposium, *April '22*

Living Solar Panels: Toward Opuntia-based Electricity, Plant Science Symposium, *Feb '22*

Living Solar Panels, CORE STEM Mixer, Oak's College, *Nov '21*

California's Dying Salton Sea, Cairo Water Week, *Oct '21*

Lithium at the Salton Sea, Salton Sea Seminar, *Sept '21*

Becoming a STEM Researcher, Earth Team Guest Speaker, *Dec '20*

Technology for Conservation, Climate Corps AmeriCorps Webinar Series, *April '20*

Blockchain for Nature & People, Blockchain for Social Impact Coalition Incubator, *Feb '20*

New Finance Mechanisms Panel, Blockchain for Social Impact Coalition Conference, *June '19*

Smart Contracts for Conservation Investment, WildCRU Colloquium, Oxford, *May '18*

PEER-REVIEWED PUBLICATIONS

Krebs, B., Torres, E., **Chesney, C.**, Kantoniemi Moon, V., Watters, J. (2017) "[Applying Behavioral Conditioning to Identify Anticipatory Behaviors](#)." Journal of Applied Animal Welfare Science 20.2: 155-75

GRANTS, AWARDS & RECOGNITIONS

ENVS Graduate Student Experiential Funding, (\$750), *May '22*
CORE Grad/Undergrad Research Mentorship Program, (\$1,200), *Jan '22*
Paliwal Club of 100 STEAM Scholars Fund, (\$1,000), *Dec '21*
Plant Science Fund, UCSC (\$220), *Dec '21*
AmeriCorps Education Award, (\$10,000), *Aug '20*
Conservation X Labs Technology Prize, Grand Prize Winner (\$20,000), *Nov '19*
17 Ideas That Could Change the World, World Wildlife Fund, *Oct '19*
NeuTreeLize Funding, World Wildlife Fund Impactio, (\$600), *Aug '19*
Distinction Award, Jesus College, Oxford (£300), *Sept '18*
Dissertation Distinction, University of Oxford, *Sept '18*
Travel Grant, Jesus College, Oxford (£800), *June '18*
Academic Achievement, Michelle Obama, *Aug '17*
Atlas Shrugged Essay Competition, Ayn Rand Institute, Finalist (\$100), *Aug '17*
Magna Cum Laude, San Francisco State University, *May '15*

CERTIFICATIONS

Human Subject Training *April '21*
Mental Health First Aid *Aug '20*
Data Analysis with Python *May '20*
Adult and Pediatric First Aid/CPR/AED *Nov '19*

SKILLS

Electronics & Programming (Arduino IDE)
Academic Writing & Conference Presentations
Biodiversity Surveys & Species Identification
Lean Agile Methodologies & Product Development
Lesson Planning & Mentoring Students
Popular Science Communication & Community Science
Project Management & Coordination
Quantitative/Qualitative Methods & Analytics
R & Python for Analytics, Visualizations & Machine Learning Algorithms