

# Xinyue Che

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## Education

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**University of California, Santa Barbara** 09.2018 - 09.2021

Bachelor of Arts in Environmental Studies

08.2022 - 04.2024

**University of Michigan, Ann Arbor**

Master of Science in Environment and Sustainability: Behavior,  
Education and Communication

**Modules:** Ocean/Atmosphere and Earth Systems, Environmental Ecology and Ethics, Political Ecology, Political Science, Personal Resilience, Green Works and Sustainability, Environmental Psychology, Wildlife and Biological Conservation, Energy and Climate Change, Water Resource Management, River and Trail Project Design, Genetic Chemistry, Computer Programming, Analytic Geometry, Linear Algebra with Applications, Economic Applications

**Cumulative GPA:** 3.235/4

### Academic Rewards:

- YCT Stipend: Fall 2018, Winter 2019, Spring 2019, Fall 2020, Winter 2020, Summer 2020, Summer 2021
- UC Santa Barbara Natural Reserve System Stipend: Fall 2019

## Research Projects

### **The Eco Vista Project: Community Transformation From Isla Vista to The Ecovillage Eco Vista**

**Project Group Member** 03.2019-07.2019

- Supervisor: John Foran, Professor of Environmental Studies, University of California, Santa Barbara, The United States
- Encouraged, supported, inspired, and co-created the foundation of an eco-village in Isla Vista through renewable energy, a flourishing and regenerative ecology of public urban gardens, cooperative, affordable eco-housing, a circular, local eco-economy based on solidarity.
- Met the real needs of the inhabitants: a vibrant web of visionary cultural creativity, radical self-governance, and community priorities determined by all who reside here.

### **Remote Sensing and Satellite Image Analysis Project**

**Research Group Member** 02.2021 - 03.2021

- Supervisor: Richard Walker, Professor of Active Tonics, University of Oxford, United Kingdom
- Learned about the main elements of satellite remote sensing and the development history of satellite systems.
- Investigated how satellite data can be displayed, and how the data can be analyzed for a range of applications.
- Researched wildfire papers and collected 15 reference papers about wildfire and forests.
- Created Normalized Difference Vegetation Index (NDVI) images from 1987, 1992, 1997, and 2002 in Mohe area of Northern China
- Created contour lines and AHP models to calculate indicators affecting wildfire in the Mohe area.
- Created entropy models to conduct deeper and more accurate analysis within each parameter.

## **Eliminate Ride-Sharing Services Behavior in the University Community**

**Project Group Member**

01.2023–04.2023

- Supervisor: Raymond De Young, Professor of Environment and Sustainability, University of Michigan, Ann Arbor
- Reduced student overreliance on ride-sharing services to promote other means of transport and reduce carbon footprint.
- University of Michigan students' transportation transformation based on interventions grounded in value-based norms, norm-activation models and self-regulated behavior change models to eliminate ride-sharing services use.

## **Meijer GHG Scope 3 Phase 2 Supplier Engagement and Emission Reduction Goal Supply Chain Emissions Reduction Project**

**Project Group Member**

01.2023–present

- Supervisor: Petri Erik, Adjunct Associate Professor of Environment and Sustainability, University of Michigan, The United States
- Supported Meijer, a significant supply chain in the US, to fulfill core values of sustainability by developing a Supplier Engagement and Emissions Goal that Meijer aims to achieve by a given year.

## **Publications**

Xinyue Che, Ke Diao and Kangzhe Zhou. "Evaluation of environmental recovery and vulnerability in the Mohe area by using mathematical modeling and remote sensing techniques," E3S Web of Conferences, EDP sciences, Vol.308 (2021), ISSN:2267-1242, 02003.

## **Work and Internship Experiences**

### **Subordinate Organization to the U.S. Green Chamber of Commerce**

**Researcher**

06.2021- 02.2022

- Worked as an researcher in ocean protection section
- Created coral reef conservation toolkit and educational video for the public.
- Collaborated with U.S. Green Chamber of Commerce to design ocean conservation projects.

### **Your Children's Tree Organization**

**Intern**

01.2019 - 09.2020

- Worked as the secretary of non-profit student organization.
- Organized regular meetings, took meeting minutes, and coordinated with the team to ensure action items were completed.
- Made educational videos and presentations about trees and plants for children in local elementary schools.
- Planted trees on weekly basis and kept a track of the trees planted.
- Conducted soil management after trees were planted.
- Maintained and cared for the trees planted; managed invasive species and insects; restored historic groundwater level and deforestation.

## **Extracurricular Activities and Volunteer Experiences**

### **Aquatic invertebrate research in Coal Oil Point Reserve Project conducted by The Santa Barbara Audubon Society**

**Volunteer**

06.2019 – 03.2020

- Used a microscope to observe and account number of invertebrates in the water sample.
- Identified the species of invertebrates in water sample and categorized them.
- Detected bacteria species and abundance of microorganisms from polluted water samples.

### **Santa Barbara Sea Crew Center**

#### **Volunteer interpreter**

01.2019 – 03.2020

- Worked as an interpreter in the weekly exhibition and introduced different marine fishes to visitors.
- Observed and recorded life conditions of marine species in the Center, including starfish, seals and sea lions, whales, dolphins, porpoises, etc
- Was involved in rescue projects to save marine animals affected by oceanic oil spills.

### **GiveVolunteer (based in Laos)**

#### **Volunteer**

12.2019 – 01.2020

- Fed black bears in the bear conservation site in Laos
- Taught local children about fun science class.
- Helped farmers rebuild houses and plant crops after a large earthquake that struck the local area.

### **Skills and Certificates**

- Language: Mandarin (Native), English (Fluent)
- Programming skills: R studio, ArcGIS, Excel