

Madison Power

San Diego County, CA

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EDUCATION

University of California, Berkeley **2016-2017**

B.A Geography

Study abroad: Summer semester in Cusco, Peru

Area of Concentration: Archaeological Excavation of the Incans – Drone team

Extra curricular: TRIO SSS, Cal Jazz band, and member of Berkeley United Geographers (BUGS)

Palomar Community College **2013-2016**

A.A Social Science

A.A Math & Science

Selected to research as contestant in American Geophysical Union - Virtual Poster Showcase

Extra curricular: TRIO SSS, Palomar Jazz band, and Geoscience Club

RESEARCH EXPERIENCE

Berkeley Study Abroad Cusco, Peru
Summer Undergraduate Researcher Summer 2017

- Research field methods course under guidance of Dr. Alexei Vranich, Director and Principal Investigator of the Cuzco Archaeological Project and MIT Lecturer in the Department of Material Science
- Developed a 3D model of the archaeological site Sacsayhuamán from 100+ stitched images taken on drone
- Recorded 10+ entries of field notes on archaeological sites and conducted scale drawings of Incan dwellings
- Drew maps on field representation for reference of 3D model configuration

Phoebe Hearst Museum of Anthropology Berkeley, CA
Spring Undergraduate Research Apprenticeship Spring 2017

- Research apprentice under the guidance of Dr. Michael Black from the Head of Research and Information at the Phoebe Hearst Museum of Anthropology
- Developed shapefiles on ESRI ArcMap 10.5 from 35+ georeferenced physical archaeological maps from the Collections Department in the Museum. The purpose for the

shapefile creation is for Archaeologists to use for future research in geographical regions such as Australia, South America, and West Coast of United States

- Pioneered the implementation of ESRI products (such as ArcMap) into the Research and Information Department at Phoebe Hearst Museum of Anthropology

Palomar College

San Marcos, CA

Spring Undergraduate Researcher

Spring 2016

- Research under the guidance of Dr. Wing Cheung, Assistant Director from the NSFF-funded Geospatial Technology Center of Excellence, Director of the Drone Technology and Environmental Studies Program at Palomar, and Geography professor at Palomar College
- Selected for research as contestant for American Geophysical Union – Virtual Poster Showcase
Developed Thesis: Floods and the environment: How climate change is impacting ecologically sensitive areas in San Diego County
- Presented research in form of static visualization poster and video presentation to American Geophysical Panel
- Researched and analyzed 100+ geolocated points to determine the ecological impact of the 100 year flood (or 1% annual exceedance probability) event by examining the impacts of invasive plants (Perennial pepperweed) can have on environmentally sensitive areas located within the FEMA 100 year floodplain in San Diego County

ABOUT

Creative and systems-oriented educator with a background in Geography (BA), Music education (CSET certified), and youth-centered creative production. Experienced in GIS, Qualified music instructor, curriculum design, digital game design/development, children's writing and publishing. Passionate about integrating storytelling, arts, and spatial thinking into meaningful learning environments for the youth.

SCHOLARSHIPS AND AWARDS

Hard Hat Value Award (for developing Sign Data Management app), 2022
awarded at City of Carlsbad

Phi Theta Kappa Honor Society, awarded at Palomar Community College 2015-2016

James H Paquin/ Osher Scholarship, awarded at Palomar Community College 2015

Deans List, awarded at Palomar College

2014-2016

CONFERENCES

ESRI User Conference, San Diego 2025

ESRI User Conference, San Diego 2024

ESRI User Conference, San Diego 2023

ESRI User Conference, San Diego 2022

ESRI User Conference, San Diego 2016

American Geophysical Union Virtual Poster Showcase, 2016
Chosen as a participant to present research for the Poster showcase.

CERTIFICATIONS

Music CSET certified
Issued: January 2026

MADISON POWER

The signature on your certificate is reported on individual Test printed test results.

CSET Single Subjects/World Languages/PET	
Passing Subtest Summary Report	
Subtest (Test Code)	Date Passed
Music I (226)	12/08/2025
Music II (227)	03/13/2025

ServSafe Food Protection Manager
Issued: 5/30/2025

Credential ID: 27488751

County of San Diego Food Handler
Issued: December 27, 2024

Credential ID: 1i4f4f-k4ike57

Developing in AR/VR/MR/XR Apps with XR, Unity, and Unreal

Issued: March 2024

Credential ID: TJHWN3CGZY9M

EMS SAFETY SERVICES, CPR/AED/FIRST AID
Issued: August 2022

Credential ID: C78560016

PADI, Open Water Diver
Issued: July 2022

Credential ID: 22070B2888

NOAA, Introduction to LIDAR
Issued: June 2022

Interaction Design Foundation (IxDF), HCI
Issued: April 2022

Credential ID: 125444-2022-724942

Link:

<https://www.interaction-design.org/madison-power/certificate/course/60711e8a-fd0f-44e5-9892-4eef6906fbc4>

Interaction Design Foundation (IxDF), Mobile UX Design
Issued: April 2022

Credential ID: 125444-2022-736290

Link:

<https://www.interaction-design.org/madison-power/certificate/course/f16dfbfa-cd53-4f54-9bc7-a874bf63715c>

Duke University, Programming JavaScript, HTML, & CSS
Issued: April 2022

Credential ID: Q2S5R5Y6A7LV

Link:

<https://www.coursera.org/account/accomplishments/verify/Q2S5R5Y6A7LV>

Google, Google UX Design Professional Certificate
Issued: March 2022

Credential ID: RRZCRWRQX45Y

Link: <https://www.coursera.org/account/accomplishments/specialization/certificate/RRZCRWRQX45Y>

FEMA, IS-700.b: Introduction to National Incident Management System
Issued: July 2021

FEMA, IS-100.C: Introduction to the Incident Command System
Issued: July 2021

IBM, Data Analysis with Python

Credential ID: XDZ2UH477Y7R

Issued: November 2020

Link:

https://www.credly.com/badges/3e9f4d2c-548c-404f-9ba7-f27c0620bcff?source=linked_in_profile

University of Michigan, UX Research & Design Spec.

Credential ID: BVDN3498FS9V

Issued: August 2020

PROFESSIONAL EXPERIENCE

Banding Together

Music Therapy (volunteer)

San Diego County, CA

August 2024- Present

- Apart of a team that works with adults that have special needs. We use music to learn vital skills such as communicating feelings, communicating to others respectfully, and how to process emotions when feeling upset.

Surfrider Foundation

Bluewater Task Force (volunteer)

San Diego County, CA

July 2024- Present

- Apart of groups that do beach cleanups at local beaches throughout San Diego County.
- Took water samples in Oceanside and deliver samples to local labs to be examined for water quality testing.

City of San Clemente

Senior Engineering Technician

San Clemente, CA

June 2024 - Present

- Managed SQL geodatabase through the role as an SQL database Admin. Conduct feature class changes, edit existing and new schema, manage multiple versions, configure GIS fields to be compatible within Lucity and coordinate with CMMS Coordinator, and cleanup fields.
- Managed grant writing coordination with contractor's and edited grant letter of intent, one of which being Ocean Protection Council SB 1 Track 1.
- Research land-use right of way for varying projects ranging from storm pipes in relation to sinkholes all the way to determining water mains near local water sheds.
- Create maps and web applications for varying different Engineers by utilizing the use of different tools within GIS such as buffer, spatial joins, ArcPy integration, and pop-up integration with pictures enabled.
- Examining tract maps and associated documents such as grading plans, easement documents, amendments, and improvement plans to determine right of way for city assets of varying types of conditions (ex. Abandoned).
- QA/QCing water utility designs from Engineering plans through checking calculations for flow rate, elevation, and slope.

Madi Power

App Designer/Developer

Oceanside, CA

September 2025

- Created a video game for Tuck's Green Heart by creating some 3D assets within Maya and coordinating with other 3D modelers to create characters.
- Spent 6 years self-learning 3D modeling(Maya), UI/UX design, app development, music composition(Pro Tools), game development(Unreal Engine and Unity), and coordinating with contractors(advanced Software developers to debug) to create the game.
- The game got accepted into the Apple Store September 2025 and is currently available in the Apple Store: <https://apps.apple.com/us/app/tucks-green-heart/id6744701747?l=pt-BR>

Madi Power
Self Published Author

Oceanside, CA
June 2024

- Wrote the Children's book "Tucks Green Heart: a tale of a Turtle that Dared to dream" and coordinated with illustrator to create illustrations. The book is about a young turtle named Tuck who learns to value his unique gifts after not earning a special patch like his friends. The story follows Tuck's journey of self-discovery as he learns to trust his own timing, find his special skills, and use them to help others and care for the ocean, ultimately finding his own "green heart" patch.
- Attended Los Angeles's Children's Book Fair September 2025 as a vendor and did public readings of the book
- Book available worldwide on Amazon, Barnes & Noble, Walmart, and Powell's Bookstore <https://www.amazon.com/Tucks-Green-Heart-Turtle-dared/dp/B0D9CWXTYX>

San Diego Archaeological Center
GIS Intern (volunteer)

Escondido, CA
May 2022 - June 2024

- Compiled prior research of archaeological sites around the world and within the United States to then create 2 web apps catered towards children ages 8-14. App encompasses features such as site reconstruction sliders, mp4 integration (YouTube videos), 3D model zoom feature to site on Google Earth, music of the particular cultural group associated with the archaeological site, historic information about the site, and a timeline feature of all the sites in chronological order.

City of Carlsbad
Engineering Technician II

Carlsbad, CA
April 2022 - June 2024

Promoted from Engineering Technician I to Engineering Technician II within a year

- Interviewed 30+ stakeholders to create various products including web apps, web maps, workflow migrations, schema changes, standardization in data categories, and vicinity maps.
- Developed and designed a proactive web app (Sign Data Management) with corresponding new workflow. The Web app was created for field crew workers to communicate proactively about assets within the field, with the availability for field crew workers to import images of assets, create a new asset in the field, and edit existing assets. Once assets are uploaded to the staging database, Engineer technicians can then QA/QC assets with associated work order.

- Oversaw Plan & Permitting Digital Submittal Reviews for 100+ Grading and Improvement plans within Carlsbad's jurisdiction.
- Compiled a list of 1000+ orphan assets to then research and delegate list of unit ID's to Traffic Engineer tech to find historic information within static work orders and Business Systems Analyst to find historic info within Laserfiche. Resulted in all orphans except 3 being sunk to the enterprise database with associated information.
- Pioneered new work order workflow through syncing data in Geoadmin tool within GIS to then sync 200+ assets to Hansen (asset management software). Once assets are in Hansen, work orders are generated with tied unit ID of asset within GIS, making the unit ID a searchable field within the Sign Data Management app.
- Emergency response worker responsible for implementing GIS and supplemental support to differing departments.

City of Carlsbad
Engineering Technician I

Carlsbad, CA
April 2021 - April 2022

Promoted from Engineering Technician I to Engineering Technician II within a year

- Interviewed stakeholders to create various products including web maps, web apps, and vicinity maps.
- Analyzed and performed Digital Submittal Reviews for Grading and Improvement plans within Carlsbad's jurisdiction.
- Researched and analyzed as built for data management purposes.
- Emergency response worker responsible for implementing GIS and supplemental support to differing departments.

Valley Center Municipal Water District
GIS Analyst

Valley Center, CA
February 2021 - April 2021

- Utilized internal asset management software called VC works, to QA/QC water meter geolocation accuracy.
- Conducted asset management through updating asset information within GIS from research of encroachments through as-builts.
- Updated database synchronization within GIS of water meter and encroachment assets.

Portland Water Bureau
Engineering Technician
2020

Portland, OR
February 2020 - August

- Delivered technical support on architectural and construction projects through using Bluebeam REVU to further provide assistance to Design project staff to the ROW and building renovation teams.
- Constructed and compiled data for the creation of data visualization pieces for 10+ water bureau committees.
- Analyzed Street opening permits for Design staff by annotating asset changes of water facilities.
- Prepared deliverables for the Steering committee and was a member within multiple water bureau committees.
- Developed and designed intake forms to be compatible with CMMS.

Clean Water Services
Engineering Technician
November 2019

Beaverton, OR
February 2019 -

- Construct asset management web app solutions for water quality facilities.
- Customized "as is" and "to be" solutions for customers through Lean Six Sigma methodology.
- Developed application to track vehicle location and calculate mileage for data management.
- Researched and compiled evidence in the form of a timeline visualization piece of a food service establishment that was exceeding FOG (fats, oils, and grease) limits. Piece was used as a presentation piece to show FSE staff the impact of excessive FOG from their lateral.

City of Santa Clara
GIS Tech Intern
2018

Santa Clara, CA
June 2018 — August

- Created 3D models of city buildings on Auto CAD 3D Map 2019 and transformed layers within ArcMap.
- Managed geodatabase for city owned buildings within ArcMap.
- Georeferenced AutoCAD files of floor plans to current Santa Clara city owned buildings on ArcMap.
- Data analysis of over 100+ files where data was further implemented into ArcMap and AutoCAD.

UC Berkeley School of Law
IT Technician
2018

Berkeley, CA
August 2016 — May

- Guided law school students with software and hardware malfunctions.
- Led 300+ students with software installation for their personal devices and exported personal files to make them compatible with Law school software.
- Diagnosed hardware malfunctions and made repairs of printers and scanning stations throughout the law library.
- Conducted repairs on 5+ HP towers and changed out RAM throughout the law library.

Palomar College GEAR UP
Academic Leader/Mentor
2016

San Marcos, CA
February 2015- July

Promoted from Academic Tutor to Academic Leader/Mentor within 6 months of working with GEAR UP.

- Instructed students in subjects on Geometry, Chemistry, Biology, and U.S history where English was their second language.
- Developed personal timetables for students to create goals for their personal lives and academic goals.

- Coached 2 students to graduate high school and guided them through college application to their dream schools.

Palomar College
STEM Ambassador

San Marcos, CA
March 2015-July 2016

- Presented lab demos to groups of 25+ students in K-12 classrooms on various STEM subjects in the hopes to inspire students to find STEM subjects and higher education interesting.
- Led chemistry lab demo and geology lab demo. Demo involved setup and break down of materials, teaching students how the presentation relates to real world examples, and having dialogue with the students when presenting.
- Guided group of 15+ students in IT tech camps for general coding assistance.

Sunglass Hut
Sales Associate

Escondido, CA
April-September 2015

- Led Power shifts (working alone) and managed inventory within the store.
- Created an emotional connection with the customer to ensure they got the product that they came in for.
- Set up and broke down seasonal marketing displays.
- Ensured a professional and clean environment was provided for customers to feel invited within the store.

PROJECTS

Clean Water Services

Beaverton, OR
March 2019

Topic: Fog issues at Food Service Establishment (FSE)

Overview: Clean Water Services issued a Notice of Violation on December 3, 2018, to Food Service Establishment (FSE) for violating Resolution and Order 09-1 Section 2.02 c, which prohibits the discharge of solid or viscous substances, which will or may cause obstruction to the flow in the sewer. Data collected by Clean Water Services indicate a lack of effective FOG pretreatment that results in discharges of FOG into the public collection system. The discharge has caused a buildup of FOG that obstructed the flow of sewage and damaged the sewer main. Enterprise appealed the Notice of Violation to the Assistant Director of Regulatory Affairs and the Chief Executive Officer of Clean Water Services.

- I created a call out visualization piece with a timeline feature showing the progression of the FOG buildup in the public main. I then presented the static visualization piece to stakeholders such as the CEO of Clean Water Services, Conveyance Department Director, Field Operations Director, FOG Director, and Lead FOG inspector. After the presentation, the CEO used the visual piece as evidence when meeting with the FSE. The FSE then compiled and got a new grease interceptor.

UC Berkeley

Berkeley, CA
December 2017

Topic: North Atlantic Gyre and Micro Plastic Accumulation: Potential ecological devastation for low-lying regions in the Mediterranean and North African Coast

Overview: Plastic is one of the most abundant components of marine debris and is caused by anthropogenic factors in industrialization and the global strive for modernity. Plastic entering the ocean is partially due to the ideology of nature being perceived as the “external”. As Smith states, “Nature is external, a thing, the realm of extra human objects and processes existing outside society. External nature is pristine, god given, autonomous; it is the raw material from which society is built, the frontier which industrial capitalism continually pushes back” (Smith, 1984, 2). Nature is seen as a place that humans have dominion over, with a falsehood of nature providing an infinite abundance of resources and acting as a storage unit for commodities of waste. Although, the ideology of external nature does not take into account pollution and specifically how plastic accumulates in the sea. The sea is seen as a storage basin for capitalistic entities and consumers to provide waste into the mysterious and infinite vastness of the ocean and all with no adverse repercussions. This faulty ideology has caused adverse repercussions in the environment and specifically with plastic accumulation in the North Atlantic Gyre from natural processes, anthropogenic factors, and climate change further exacerbating the issue.

- Smith, N. (1984) Chapter 1, The Ideology of Nature. Uneven Development: Nature, Capital, and the Production of Space. 1-34

- I conducted research of micro plastic data within the North Atlantic Gyre from data collected from ArcGIS Online (I cross checked the metadata for data integrity purposes). I then used ESRI ArcMap to map out the regions of micro plastic hotspots along the Mediterranean and North African Coast. I tied in the ideology of nature seen as the external to be the framework for the anthropogenic behavior of treating the ocean as a storage basin for capitalistic entities and consumers to emit waste into.

UC Berkeley

Berkeley, CA
October 2017

Topic: Dodd Frank Act, section 1052 and Conflict Minerals in the DRC

Overview: The Dodd Frank Act may be an actual Band-Aid approach to the real problem of laborers working within the realm of conflict minerals and stakeholders proclaiming their assurance that the solution to reduce conflict is by buying “conflict free” minerals. The political ecology of environmental conflict and exclusion, reveal the question: Are the insurgency groups

the actual problem in regions such as the DRC that have large resource allocations or are they a symptom of the larger issue of globalized infrastructure that dispossess individuals that are not of high socio-economic standing? Insurgency groups within the global South tend to be framed as “savages”, yet the desire to understand their actions for rebellion within their society seem to dwindle in the background. Perhaps, the actions of insurgency groups may be an outcry of their societies' experience with the unevenness of global capitalistic framework at work.

- I conducted research on the History of the Dodd Frank on a National (US) and International scale. I also researched the relationship between outsourcing labor, the global commodity chain, and conflict minerals. There is also a cross analyses on different theories of what constitutes a “conflict minerals” in the DRC, ranging from (*Billon’s various theory*), (*Watt’s theory of the political tool kit*), (*Cuvelier’s theory/ natural resources and poverty*), and (*Financial regulation, Volcker rule, and uncertainty of “conflict free minerals”*).

Palomar College

San Marcos, CA

May 2016

Topic: Abandoned Uranium Mining (AUMS) and the Navajo: How radioactive waste may be impacting waterways and structures around the Navajo reservation

Overview: Areas found within 0.5-1 mile of Abandoned Uranium Mines in Arizona and New Mexico.

Areas of concentration are between streams and structures within the Navajo Nation geographical region.

Streams and structures with highest concentration of Uranium within/outside of the Navajo reservation are close in geographic proximity to the AUMS. Appears to be a point of interest due to radioactive disintegration (unstable atoms exploding microscopically and Radon Progeny turns into lead causing counteractive results within Homo sapiens’ consumption.

- Purpose was to examine the potential repercussions of nearby structures on Navajo land that are within .5 mile radius of streams transporting levels of radioactive Uranium contaminants to areas within and outside the AUMS. By using data with ArcMAP I found that 4 of the five hundred structures could pose a threat to minors and large amounts of people (Navajo and tourists) from Uranium levels in 2016.

LANGUAGE

- English - Native
- Spanish - Intermediate
- American Sign Language - Intermediate

EXTRA-CURRICULAR ACTIVITIES

Playing jazz music, pastry art, hiking, rock climbing, scuba diving, snorkeling, and composing music in DAWs.