

Meryl Kruskopf, EIT

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Education

CORNELL UNIVERSITY, College of Engineering, Ithaca, NY

Bachelor of Science in Environmental Engineering

Spring 2016

UNIVERSIDAD DE CANTABRIA, ETS de Ingenieros de Caminos, Canales y Puertos, Santander, Spain

Cornell Cantabria Exchange Program

Fall 2014 - Spring 2015

Certification, Engineer-In-Training, Board of New York 093105

Programming Languages

Javascript • Python • Unix Shell

Geospatial Programs

ArcGIS Pro/Online/Collector • Google Earth Engine

Language Skills

Spanish (Proficient)

Work Experience

Regional Science Associate, NASA SERVIR, *University of Alabama in Huntsville, AL*

August 2021 – Present

- Manage air quality applied science team ensuring timely transition of science products
- Lead partnership between SERVIR hubs and the Global Wildfire Information Systems (GWIS) team
- Write articles for NASA Applied Sciences to highlight impact of scientific research
- Manage web development contractor to ensure air quality web and mobile application meets hub needs
- Validate air quality forecast to facilitate adoption of research by hub, present results at AGU conference

Staff Engineer, Wildscape Engineering, *South Lake Tahoe, CA*
2021

April 2019 – June

- Create maps and process LiDAR data in ArcGIS Pro in support of river restoration and stormwater drainage projects
- Manage stormwater compliance and NPDES permitting and monitoring for 8 marinas
- Organize and perform field work such as GPS, RTK, and total station surveying
- Assist in Project Management tasks such as organizing and facilitating TAC meetings and data management

NASA DEVELOP Participant, *Science Systems and Applications, Arizona State University*

January 2021 – April 2021

- Coded a data processing tool in Google Earth Engine to download albedo and land use data from the NLCD
- Researched and ran the InVEST Urban Cooling model, compiled inputs and created QC procedures
- Collaborated with public partners to provide data driven decision making tools

NASA DEVELOP Participant, *Science Systems and Applications, Arizona State University*

January 2019 – April 2019

- Developed a land classification tool in Google Earth Engine using optical and synthetic aperture radar (SAR) satellite data from NASA earth observations
- Collaborated with team members and partner agencies to research flood preparedness tools
- Prepared technical report and presented to partners and researchers at NASA Jet Propulsion Laboratory

Physical Science Technician, *National Park Service, Yosemite National Park*

May 2018 – November 2018

- Maintained air quality monitoring equipment for ozone, acidic deposition, and ammonia for NADP
- Operated Environmental Beta Attenuation Monitors (E-BAM) used for particulate matter measurements
- Sampled front country and backcountry water sources, processed, and shipped samples

GIS Technician, *Quantum Spatial Contractor through Modis, Portland, OR*

November 2017 - May 2018

- Edited LiDAR data using Microstation and ArcGIS to create accurate ground models
- Created vegetation buffers for utility structures using ArcGIS and Microstation

Volunteer Experience

Data Management and Meadow Monitoring Intern, *SCA Americorps, Yosemite National Park*
2017

May 2017 – October

- Managed data storage and access using Enterprise GIS, ArcGIS, and Web GIS
- Design National Park Service webpage for the Visitor Use and Impact Monitoring Program
- Monitor meadow fragmentation, residual biomass, and bare soil conditions in sub-alpine meadows

Systems Research and Evaluation Intern, *Global Knowledge Initiative, Washington, DC*

November 2016 - May 2017

- Consolidated and organized resources into a 50 page report pertaining to challenge design
- Organized and managed the database of over 5,000 contacts using functions in Excel
- Researched and designed the organizational Theory of Change diagram
- Provided supporting research to develop a systematic understanding of the healthcare supply chain in Ethiopia

International Experience

Agua Clara Project Team Member, *Honduras*

January 2016 – May 2016

- Traveled to water treatment plants in Honduras and talked to plant operators and water board members about efficacy of plants and issues with water supply
- Investigated and documented impacts of the plant's waste stream
- Discussed observations of water quality with locals and communities
- Collaborated with Honduran locals to write children's book about water treatment in Spanish

Microbiology Lab Intern, *Oxital, Santander, Spain*

June 2015 - July 2015

- Provided routine lab services such as pH, conductivity calibration and media preparation
- Filtered water samples to test for pathogenic bacteria such as *E. coli*, *Legionella pneumophila*, *Pseudomonas aeruginosa*, etc.
- Communicated with coworkers and employer in Spanish

Authorships & Presentations

A150-1442 Regional Air Quality Model Simulations over the Hindu Kush Himalaya Region: Methods and Validation
Poster Presentation | American Geophysical Union Fall Meeting | 12-16 December 2023

American River Parkway Natural Resources Management Plan
Wildscape Engineering Spring 2021

Utilizing NASA Earth Observations to Identify Drivers of Extreme Urban Heat and Generate a High Resolution Vulnerability Index for Urban Planning and Climate Resiliency in San Diego, CA
NASA DEVELOP Spring 2021

Employing NASA Earth Observations in the Greater Toronto Area to Improve Flood Preparedness for Coastal Communities
NASA DEVELOP Spring 2019