

# Tasos Tentoglou

San Jose, CA | ttentoglou@gmail.com | tasos-tentoglou.github.io

## EDUCATION

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### University of California, Merced

*B.S. Environmental Engineering*

**Merced, CA**

*December 2021*

### Affiliations and Organizations:

Earth Observation and Remote Sensing (EORS) Lab, Geospatial Energy Resource and Life Cycle Assessment (GERLCA) Lab, Engineers for a Sustainable World (ESW)

## WORK EXPERIENCE

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### National Aeronautics and Space Administration - NASA

*DEVELOP / SSAI – Project Lead*

**Mountain View, CA**

*Jan 2022 – Apr 2022*

- Led a project team in collaboration with NASA applied scientists in updating a Google Earth Engine interactive tool that utilizes NASA Earth Observations to monitor water quality parameters on coral ecosystems in the Caribbean.
- Final products used to guide NASA applied scientists in research efforts.

*DEVELOP / SSAI – Remote Sensing Researcher*

*June 2021 – Aug 2021*

- Collaborated with Louisiana Department of Natural Resources and Coastal Protection and Restoration Authority in the development a Google Earth Engine tool (Tool CREOL) that uses 30+ years of NASA satellite imagery to monitor historical changes in the extent of seagrass meadows along the Louisiana coast.
- Awarded the SSAI Scholarship for exhibiting NASA DEVELOP's core values of collaboration, discovery, service, and passion.
- Awarded 1<sup>st</sup> place out of 21 teams in the NASA DEVELOP Creative Communications Competition.

### University of California, Merced

*EORS Undergraduate Researcher*

**Merced, CA**

*Jan 2021 – Jan 2022*

- Integrated dark spectrum fitting atmospheric correction into Google Earth Engine Python API.
- Utilized NASA Earth Observations through Google Earth Engine in analyzing burn severity and albedo change concerning California wildfires.
- Collected and processed hyperspectral UAV imagery for precision agricultural orchard applications.

*Library Student Specialist, Digital Curation and Scholarship*

*Oct 2018 – June 2021*

- Worked on archival processing, arrangement, digitization, and preservation of University of California Cooperative Extension Agricultural material.
- Digitized and managed data at a multi-terabyte scale.

*GERLCA Undergraduate Researcher*

*Aug 2020 – Dec 2020*

- Learned the basics of Life Cycle Assessment (LCA).
- Assisted graduate student in revising thesis for publication regarding LCA of electricity from community based bamboo gasification in a rural and remote island of Indonesia.

### Elite Framers

*Construction Intern*

**Palo Alto, CA**

*Jun 2018 – Aug 2019 (summer)*

- Assisted in building structures for residential, business, and construction sites.
- Worked alongside a general contractor in various tasks such as foundation work, framing, roofing, siding, insulation, and interior finish.

## SKILLS

### *Communication*

- Leadership
- Management
- Data presentation
- Technical writing
- Partner collaboration

### *Programs and Platforms*

- Google Earth Engine
- GitHub
- GitLab
- ArcGIS Products
- Jupyter/Colab

### *Programming Languages*

- JavaScript
- Python
- R
- Git
- Bash

## PEER REVIEWED PUBLICATIONS

Tentoglou T, Burmistrova J, and Hestir E. "Burn Severity and Albedo Analysis Concerning the Mendocino Complex Fire." 2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS. IEEE, 2021.

DOI: 10.1109/IGARSS47720.2021.9555036

## TECHNICAL REPORTS

Moeen M, Babin D, Tentoglou T, Waite T, and Young K. "Louisiana Water Resources: Using NASA Earth Observations to Monitor Historical Changes in the Extension of Seagrass Meadows in the Breton National Wildlife Refuge in Louisiana." NASA Technical Reports Server. NASA, 2021.

## ORAL CONFERENCE PRESENTATIONS (Presenting author underlined)

Moeen M, Babin D, Young K, Waite T, and Tentoglou T. August 11, 2021. "Using NASA Earth Observations to Monitor Historical Changes in Extent of Seagrass Meadows in the Breton National Wildlife Refuge in Louisiana." *NASA Earth Science Applications Week (ESAW)* Virtual Symposium.

Tentoglou, T, Burmistrova J, and Hestir E. July 14, 2021. "Burn Severity and Albedo Analysis Concerning the Mendocino Complex Fire." *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)* Virtual Symposium.

## POSTER CONFERENCE PRESENTATIONS (Presenting author underlined)

Tentoglou T, Waite T, Moeen M, Babin D, and Young K. December 14, 2021. "Tool CREOL: Using Earth Observations to Monitor Ecosystem Health for the Preservation of Coastal Louisiana." *American Geophysical Union (AGU)* Conference

## AWARDS and HONORS

2021 Runner-up AGU Michael H Freilich Student Visualization Competition  
2021 1<sup>st</sup> Place NASA DEVELOP Creative Communications Competition  
2021 Chancellor's Honor  
2020 Dean's Honor

## GUEST LECTURES

University of California, Merced

"Aquatic Remote Sensing Applications, Remote Sensing of Oceans and Coasts" in ENGR 180 Spatial Analysis, Fall 2021

"Expanding the Outdated Air Pollution Monitoring Network, Applications of Civil Engineering" in CE 001 Civil Engineering Seminar, Fall 2021

## **LEADERSHIP**

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### **NASA DEVELOP**

2022 Project Lead – “Updating and Expanding the Optical Reef and Coastal Area Assessment Tool”

University of California, Merced

2022 Capstone Project Lead – “Expanding the San Joaquin Valley’s Air Pollution Network”

## **GRANTS & SCHOLARSHIPS**

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2021 AGU – Michael H Freilich Grant (\$1,000)

2021 SSAI – NASA DEVELOP Scholarship (\$1,500)

## **EXTRACURRICULAR ACHIEVEMENTS**

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2016 Eagle Scout

## **MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

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2021-present American Geophysical Union (AGU)

2010-2017 Boy Scouts of America (BSA)