



Danny O'Brien

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🔄 AtlasStudioCode

in danny-obrien-gis

PROFESSIONAL EXPERIENCE

GIS Specialist

ASM Affiliates, Inc. ✎

Nov 2020 – present
Carlsbad, CA

- Create GIS data deliverables and report maps of archaeological monitoring for SDG&E, USFS, CalFire and other private and public agencies using ArcGIS Pro.
- Develop Python scripts using the ArcGIS API to manage cultural resource geodatabases, execute spatial analysis tasks and workflows, and generate standardized report maps.
- Use ArcGIS Online and the ArcGIS API for JavaScript to create web map applications, manage web feature layers, and ensure GIS data compatibility across the organization.
- Manage and support ArcGIS Field Apps and GPS equipment (Trimble, Garmin, BadElf) for use in archaeological field data collection.

GIS Technician

Far Western Anthropological Research Group, Inc. ✎

Oct 2019 – Aug 2020
Davis, CA

- Managed cultural resource enterprise geodatabase for PG&E by formatting field data imports, creating data deliverables for outgoing requests, and ensuring GIS data validity using ArcGIS Pro and ArcMap.
- Developed Python scripts using the ArcGIS API to automate GIS data deliverable creation, perform SQL queries and bulk edits for data validation, and execute spatial analysis tasks and workflows.
- Created ArcGIS Online web maps for use in archaeological surveying to enhance field data collection and provide relevant GIS background data.
- Managed requests and technical support for GPS equipment (Trimble, Garmin, BadElf) for use in archaeological field data collection.

GIS Field Technician

Safford Lab - Department of Land, Air and Water Resources at UC Davis ✎

Jun 2019 – Sep 2019
Davis, CA

- Developed Python scripts using vector and raster libraries to prepare field data for analysis, join findings to satellite imagery, and develop wildfire ecology spatial models.
- Created field survey maps to supplement scientific research publications using ArcMap.
- Collected field data on ecosystem composition and wildfire spread using the Trimble R1 unit in Sierra Nevada forests.

GIS Technician and Drone Pilot

Jan 2019 – Jun 2019

Hijman Lab - Department of Environmental Science and Policy at UC Davis [!\[\]\(3dfb8d66e81160ad61421a3452093d1b_img.jpg\)](#)

Davis, CA

- Developed Python scripts using vector and raster libraries to aggregate agricultural production data sources, join findings to satellite imagery, and execute spatial analysis on crop production.
- Piloted the DJI Matrice to develop standardized flight patterns and procedures for collection of agricultural imagery.
- Created and managed geodatabases of agricultural boundaries and drone/satellite imagery using QGIS.

Drone Pilot and Video Editor

Jun 2018 – Sep 2018

O'Connell Landscape and Maintenance [!\[\]\(de95854c7ee024cfadc48187bbb781b2_img.jpg\)](#)

Rancho Santa Margarita,
CA

- Piloted the DJI Mavic Pro to collect video footage of brush management boundaries for documentation to the California fire authority.
- Edited videos using Adobe Premiere Pro for landscaping project showcases and California fire authority documentation.

EDUCATION

BS in Environmental Science and Management / Emphasis in GIS

Sep 2016 – Jun 2019

University of California, Davis [!\[\]\(e3275251d0893157c3584e20c81dc3ba_img.jpg\)](#)

Davis, CA

- GPA 3.8 / Top 8% of class
- Completed coursework in GIS software, geospatial programming, drone operations, remote sensing, satellite imagery, ecosystem studies, and environmental management.
- Held multiple positions at campus labs studying sustainable agriculture and wildfire ecology using geospatial and remote sensing research methods.

SKILLS

Esri Software Suite

*ArcGIS Pro, ArcMap, ArcGIS Enterprise,
ArcGIS Online, ArcGIS Field Apps*

UAV/Drone Piloting

*DJI Phantom Series, DJI Mavic Series, DJI Matrice
Series, ArcGIS Drone2Map, Pix4D, DroneDeploy*

SQL

PostGIS, PostgreSQL, MySQL, SQL Server

Other GIS Software

QGIS, ENVI, Grass GIS

Python

*ArcGIS API, QGIS API, GDAL, GeoPandas, Rasterio,
Pandas, Numpy, Matplotlib*

JavaScript

*ArcGIS API, OpenLayers, React, Redux, jQuery,
Bootstrap*

CERTIFICATES

- F.A.A. Unmanned Aircraft Systems Remote Pilot License (Part 107)

REFERENCES

Nick Doose, *GIS Manager*, ASM Affiliates, Inc.
ndoose@asmaffiliates.com, (760) 908-4100

Shannon DeArmond, *GIS Supervisor*, Far Western Anthropological Research Group, Inc.
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