

Timothy D O'Leary

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CLEARANCE

Active TS/SCI

EXPERIENCE

Senior Staff Geospatial Analyst, Radiant Solutions

June '12 – Present

- + Implementing, managing, maintaining and upgrading an enterprise open source software stack, called NOME, in an Amazon Web Services environment. NOME is a crowdsourced, mapping web platform built upon the OpenStreetMap open source software enterprise. NOME is currently used by analysts to enhance infrastructural and volunteered geographic information (VGI) data around the world on multiple government and open networks, with dozens of active daily users. Duties include learning and implementing Amazon's Virtual Private Cloud (VPC) tools to create a secure environment to host applications, managing Elastic Compute Cloud (EC2) instances, and preparing Amazon Machine Images (AMI) for data quality and consistency management. Deployed applications include technologies such as Amazon EC2, S3, RDS, ELB, Auto Scaling Groups, python, ogr2osm, osm2pgsql, osmosis, Node, PHP, Nominatim geocoder, OpenStreetMap Web API, MapBox iD Editor, Ruby on Rails, AWS command line, and github.
- + Provide continuous assistance in the management and implementation of new software capabilities on an open source software stack, MapEdit, in support of a government client at a secure site. Consistent interaction with the customer in regards to priority of software implementation, expectation of software capabilities, and running software demos. Frequently requested by leadership and customers to lead software demonstrations and highlight new capabilities to existing and potential customers.
- + Assist in onboarding and training of new hires; includes technical onboarding and introducing them to software lifecycle support using and open source approach
- + Implemented a solution for performing geocoding across multiple data sources and publishing the tool as a service in a secure deployment configuration. The project involved implementing a geocoder for a customer's offline high-side environment. The integrated geocoder is used by analysts daily, receiving batch requests through REST and individual requests through NOME.
- + Conducted research on an IARPA funded project using map algebra for distributed (cloud-based) geospatial processing. Some duties included writing python/ArcPy scripts for batch image processing and batch queries of CSV files in a system that utilized Hadoop to save processing time as well as using Geospatial Data Abstraction Library (GDAL) for tasks including raw data processing, mosaicking imagery, and vector/raster data preparation.

Geospatial Analyst Intern, Marine Corps Intelligence Activity Summer/Winter Intern 2011

- + Trained alongside government civilian and active-duty Marines to create dozens of compound maps directly supporting operations in Afghanistan. Products were used by active-duty Marines overseas for mission planning and feature point-of-interest (POI) detection during active operations.
- + Perform map production using various techniques including versioned editing, feature creation, cartographic representation via PLTS Grid Manager, data management, and quality control
- + Perform map dissemination tasks including data conversion to multiple formats and positioning files and products for distribution to end users

EDUCATION

Self Directed

Amazon Solutions Architect (associate) - Udemy / **November 2017**

Docker for DevOps - Udemy / **March 2016**

Learn App Development with Docker - Udemy / **May 2016**

HTML & Javascript Bootcamp - Udemy / **November 2016**

An Introduction to Interactive Programming in Python - Coursera / **October 2013**

Virginia Polytechnic Institute and State University 2012

Bachelor of Arts, Geography - Geospatial Analysis

SKILLS

- | | |
|--|---|
| ❖ Amazon Web Services Management | ❖ Osm2pgsql |
| ❖ Amazon Command Line Interface | ❖ Osmosis (command line Java application) |
| ❖ Amazon Elastic Compute Cloud | ❖ PostgreSQL/PostGIS |
| ❖ Amazon Simple Storage Service | ❖ OpenStreetMap |
| ❖ Amazon Virtual Private Cloud | ❖ Raster Data Manipulation and Analysis |
| ❖ Amazon Relational Database Service | ❖ Nominatim Geocoder |
| ❖ Amazon Elastic Load Balancing | ❖ Raster Image Tiling |
| ❖ Amazon Auto Scaling Groups | ❖ QGIS (1.8-2.14) |
| ❖ Git command line utilities (commit, push, pull, rebase, etc) | ❖ Ubuntu 12.04 - Current |
| ❖ Ruby on Rails | ❖ Centos 6.5 - Current |
| | ❖ Python |