# **JOHN SOLLY**

Medford, Oregon | **C**279.321.2870 | **■** jsolly@pm.me

Full stack developer with domain expertise in GIS, Remote Sensing, and business intelligence. Highlights include TDD web development in React and Django, in-depth knowledge of CI-CD tooling, and real-world experience in SDLC. Writes and tunes complex SQL queries and understands database design concepts and data modeling.

### PROFESSIONAL EXPERIENCE

## **University of Maryland**

College Park, MD

**GEOSPATIAL DEVELOPER** 

Sept 2022 to Present

Technical lead for the EASIER data initiative, where I develop infrastructure for efficiently, accessibly, and sustainably onloading, analyzing, and extracting large amounts of geospatial data into blockchain-managed, decentralized storage systems such as Filecoin and IPFS.Design, develop and integrate innovative data solutions according to stakeholder requirements.

- Create data pipelines for loading, analyzing, and retrieving cloud-optimized, geospatial data from (Filecoin/IPFS) using Bash, RSync, Singularity, Lotus, and Boost.
- Develop Dockerized RESTful STAC API, TypeScript Client, and QGIS plugin for geospatial data upload and retrieval. E2E applications are based on Landsat 9 and GEDI but are generalizable to any geographic dataset.
- Create tutorial Python Jupyter notebooks to demonstrate functionality. Maps and geospatial analysis with Geopandas, GDAL, and Rasterio. Inline maps and visualizations with Folium and Matplotlib.
- Build dynamic cache and retrieval methods for optimized hot/cold storage.

YellowfinBl Boise, ID

#### INTEGRATION CONSULTANT

May 2021 to February 2022

Empower developers as a trusted advisor. Offer technical leadership and ownership in post-sales consulting engagements with tier-1 customers, ensuring a successful customer experience.

- Design, develop and integrate innovative data solutions according to stakeholder requirements.
- Aid in complex deployments and act as an escalation point for L3 support tickets.
- Thought leader on best practices in solution and integration development. Prove processes and patterns to be leveraged by Yellowfin consultants, customers, and partners.

**ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE** | PRODUCT ENGINEER (II) May 2017 to May 2021 **CENTER FOR LOCATION SCIENCE** | RESEARCH AND TEACHING ASSISTANT Sept 2015 to May 2017 **U.C.S.B COLLEGE OF ENGINEERING** | TIER I HELP DESK Oct 2014 to June 2015

#### **PROJECTS**

- Blogthedata.com (2021 Present) Author blogsite using a Django (Python) backend. Used Jinja for templates, bootstrap for UI. Complete CI-CD workflow using QA and Dev environments with all code committed to source control and deployed to a Linode cloud server.
- **UI Automation of ArcGIS Dashboards (2021)** Create UI functional tests using Python and Selenium. Test harness scheduled through a containerized Jenkins deployment. Test results reported to multiple sources, inducing email, defect tracking tool, and MS Teams Channel. Tests uncovered over 10 high priority defects within a 6-month period.

#### **EDUCATION**

OPEN SOURCE SOCIETY UNIVERSITY (OSSU)

github.com/ossu/computer-science

Jan 2022 - Present

COMPUTER SCIENCE (B.S. Equivalent)

Fairfax, VA May 2017

**GEORGE MASON UNIVERSITY, GPA 3.93**M.S. GEOINFORMATICS AND GEOSPATIAL INTELLIGENCE

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UNIVERSITY OF CALIFORNIA, SANTA BARBARA, GPA 3.85 B.A. GEOGRAPHY (GIS & REMOTE SENSING EMPHASIS)

Santa Barbara, CA May 2015