
JOHN SOLLY

Medford, Oregon | ☎ 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.

YellowfinBI

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)

COMPUTER SCIENCE (B.S. Equivalent)

github.com/ossu/computer-science

Jan 2023 - Present

GEORGE MASON UNIVERSITY, GPA 3.93

M.S. GEOINFORMATICS AND GEOSPATIAL INTELLIGENCE

Fairfax, VA

May 2017

UNIVERSITY OF CALIFORNIA, SANTA BARBARA, GPA 3.85

B.A. GEOGRAPHY (GIS & REMOTE SENSING EMPHASIS)

Santa Barbara, CA

May 2015