Derek Dohler, JD Senior Full-Stack Engineer The Water Institute 1110 River Road S., Suite 200 Baton Rouge, LA 70802 Tel. No. (734) 546 – 2199 Email: <u>ddohler@thewaterinstitute.org</u>

## **EDUCATION**

| The University of Chicago<br>Law School | Chicago, IL   | Law              | JD, 2010 |
|---|---------------|------------------|----------|
| Washington University in St. Louis      | St. Louis, MO | Computer Science | BS, 2007 |

## **RESEARCH INTERESTS**

Software engineering and infrastructure, open-source software development, geospatial web application development, data-gathering processes, web development, code, theory of change, business strategy.

## PROFESSIONAL EXPERIENCE

| The Water Institute                  | Senior Full-Stack Engineer                        | 2023–Present |
|--------------------------------------|---|--------------|
| Element 84 (previously Azavea, Inc.) | Senior Software Engineer                          | 2023         |
|                                      | Engineering Lead, Geospatial<br>Applications Team | 2019–2023    |
|                                      | Senior Software Engineer                          | 2017-2018    |
|                                      | Software Engineer                                 | 2013-2017    |
| Transparency International Georgia   | Digital Projects Office                           | 2010–2013    |

## PROFESSIONAL SOCIETY MEMBERSHIPS

 Open Law Library, Co-Founder and Board Member, 2015–Present
Michigan Bar Association

## AWARDS AND HONORS

• Lifetime blog-writing award, Element 84

## **COMMUNITY SERVICE**

| Pennsylvania Horticultural Society | Tree Tenders |
|------------------------------------|--------------|
|------------------------------------|--------------|

#### 2018-Present

# TRAINING COURSES

• AWS Solutions Architect Associate, 2023

## **NOTABLE PROJECTS**

| Project Technical Lead/EnDMC  | 2024 |
|---|------|
| The Water Institute   |      |
| This web-based tool provides a data and model catalog to promote the discoverability, reproducibility, and reuse of existing models.  |      |
| Initial Project Technical Lead/Wildfire Risk to Communities   | 2020 |
| U.S. Forest Service   |      |
| The tool allows the public to type in community, tribal area, county, or state and view an interactive chart about wildfire risk as well as access resources to reduce risk.                                  |      |
| Project Technical Lead/DRIVER   | 2019 |
| World Bank  |      |
| Data for Road Incident Visualization, Evaluation, and Reporting: Developed to help<br>low- and middle-income countries to better collect road crash information for<br>improved road safety support solution. |      |
| Software Engineer/Cicero  | 2023 |
| Azavea, Inc.  |      |
| Cicero is a database of elected officials and legislative districts around the world.<br>The tool allows for matching addresses to legislative districts at all levels of<br>government.                      |      |
| Software Engineer/Groundwork  | 2023 |
| Element 84, Inc.  |      |
| Groundwork is a labeling solution for remotely sensed imagery which can be used to generate labels for training machine-learning models.  |      |
|   |      |

## **PUBLISHED WORKS**

# **Open-Source Libraries**

Dohler, D. (2023). *GDAL-JS* (2.2.0) [WebAssembly]. <u>https://github.com/ddohler/gdal-js</u> Dohler, D. (2022). *Loam* (1.2.0) [Javascript]. <u>https://github.com/azavea/loam</u>

## **Conference Proceedings and Presentations**

Dohler, D. (2021). Handling GeoTIFFs in client-side code with GDAL and Loam. FOSS4G.