

Tommy Morrison

Projects

ResourceProjects.org Data Pipeline

- Designed and built a system to collect, standardize and enhance semi-structured data from annual filings of 700+ natural resource companies for publication on an open data portal
- Combines web-scraping to identify documents, applications for data collection and cleaning, and data storage via Amazon S3, Google Sheets, and relational databases
- Custom R programs manage data flows between R-Shiny apps, databases, and spreadsheets to allow non-technical users to advance data along the pipeline and to publication independently

IMF Forecast Tracker apps.resourcegovernance.org/forecast-tracker/

- Application for exploring International Monetary Fund forecast data of economic indicators
- Tool combines annual standalone data publications into a single dataset to allow visualization of how projections change alongside historic values
- Used internally to identify cases of over-optimistic govt. revenue forecasts following oil discoveries
- App built with R-Shiny; data processing done in R and updated as new data becomes available

PDF Table Extractor apps.resourcegovernance.org/pdf-table-extractor/

- Public-utility tool to extract data tables from PDFs from a web browser
- Built with R-Shiny, adapted from a custom-built, in-house tool

Experience

Research & Data Associate • Natural Resource Governance Institute *Washington, D.C. • Feb. 2017 – Present*

- Technical lead on open data initiatives at global think tank
- Build sustainable pipelines for expanding content on open data portals
- Improve efficiency and accuracy of data collection projects
- Develop applications (R-Shiny) and online visualizations (d3.js) to promote our use and creation of open data
- Work with subject-matter experts and web developers to identify new ways to use and present open data in the sector

Research Assistant • Publish What You Pay - United States *Washington, D.C. • May 2016 – Dec. 2016*

- Analyzed data published by govt. agencies and oil companies to validate use cases for transparency laws

Language Assistant • Las Salinas Primary School *Almería, Spain • Sep. 2014 – June 2015*

Education

Bachelor of Arts in Economics • Boston University *Boston, MA • 2010 – 2014*

Skills

R

Data analysis, data manipulation, web scraping, data visualization, process automation

R-Shiny

Applications for internal data operations/use and public data consumption

Amazon Web Services

Cloud computing with EC2; data storage via RDS and S3

Javascript

d3.js and leaflet.js

Docker

SQL

Git/Github

Spanish