

TOBIAS LUNT

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Data scientist and researcher. Co-founder of [Development Data Lab](#). Leveraging terabytes of data, advanced analytical techniques, and modern software development practices to help alleviate global poverty. Elucidating, visualizing, and leveraging causal linkages derived from messy, diffuse data.

SKILLS

Programming:

Stats, functional programming, shell scripting, DBs, front- and back-end web dev

ML:

Image classification, clustering, text synthesis and classification

Preferred tools:

Emacs, Git, \LaTeX

SIDE PROJECTS

India mines

Built a CNN to identify and classify mines from space. Adapted 30GB of kaggle imagery; supplemented training set with 60GB processed Sentinel data, tested on 1TB of imagery.

Senate financing

Visualization of campaign contributions for the United States Senate. Data via API and bulk data portal (Python, PostgreSQL), visualized in D3, and ported to Heroku (Django).

Whitman bot

Adapted an LSTM model to mimic Walt Whitman's prose (PyTorch).

EDUCATION

UW-Madison

MS in Agroecology
Grad. Jan 2015

Dartmouth College

BS in Environmental Studies
Grad. June 2008

02.08.2021

EXPERIENCE

The Development Data Lab Aug 2019 - present

CHIEF DATA SCIENTIST AND COO WASHINGTON, DC

- Co-founded a 501(c)3 to develop cutting edge data sources and harness the latest analytical tools to help people in poverty around the world.
- Led the release of a [data platform](#) that aims to be the central analysis tool for spatial research in India.
- Open-sourced 1TB dataset of 80 million Indian legal case records - the largest of its kind in the world.
- Built a team of nine in our first year of growth.
- Oversaw the foundation of all organizational systems, fundraising, and budget management.

The World Bank

Aug 2017 - August 2019

DATA SCIENTIST WASHINGTON, DC

- Lead on a product deploying ML on TB of Sentinel imagery to track growth in illegal mining across India.
- Accelerated my team's processing 10x by automating (Bash) the extraction and parallelization of Stata code.
- Built an [interactive map](#) (JS) to visualize upward mobility in Delhi at unprecedented spatial resolution.
- Scraped, compiled, and analyzed 10^8 -observation datasets on an 80-core cluster.
- Performed causal econometric estimation, bootstrapping, random forest, and imputation.

Jahn Research Group (UW)

Nov '16 - Aug '17

RESEARCH SPECIALIST MADISON, WI

- Ran Monte Carlo simulations (R) relating food system and geopolitical instability.
- Led a project for Lloyds of London re-evaluating food system risks to the financial sector.

Fulbright

Mar - Nov '16

FULBRIGHT SCHOLAR ADDIS ABABA, ETHIOPIA

- Led a team to design and implement two surveys of smallholder farmer households.
- Assessed and visualized impact using socioeconomic data (R, RShiny).