ROBERT FRANSSEN

I have made visualizations viewed by hundreds of thousands of people¹, sped up query times for 25 terabytes of data by an average of 4,800 times², and built packages for R3 that let you do magic4.



EDUCATION

2021 2019 M.Sc., Data Science and Analytics (in-progress)

University of Missouri

St. Louis, MO

- · Focused on network models & interactive visualization platforms for electronic health records data
- · University Graduate Fellow

2014 2012 M.Sc., Geographic Information Science and Technology

University of Southern California

O Los Angeles, CA

- Thesis: Evaluating spatial changes in the rate of insurgency-violence in Central Africa: the Lord's Resistance Army 2008-2012
- · Phi Kappa Phi Academic Honor Society (4.0 GPA)

2008 2004 B.A., Crime, Law, and Justice

Penn State University

State College, PA

- · Minors in International Studies and Political Science
- · Education Broad: The American University in Cairo (Fall 2006)

INDUSTRY EXPERIENCE

current 2015

Senior Data Analyst

Symphony Retail Al

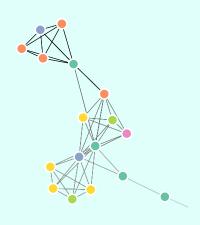
- Mechanicsburg, PA
- · Execute statistical analysis and develop targeted marketing algorithms in R and SQL against grocery retail data covering 12m active shoppers. Apply clustering, regression, and other multivariate techniques to analyze consumer trends and perform predictive analysis to drive uplift in customer engagement and revenue
- Received nominations in 2015 and 2016 for the "Encouraging Your Contribution" award for demonstrating values in Entrepreneurship, Integrity, and Collaboration.

2015 2012 **Senior IT Business Analyst**

Glatfelter Insurance Group

• York, PA

· Led multidisciplinary projects involving the company's Accounting and Claims Administration systems. Produced in-depth application and reporting requirements, set timelines and expectations with key stakeholders, and re-allocated developmental resources in response to evolving business needs.



View online at *rjfranssen.io/cv/*

CONTACT

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- @ lochnessbobster
- github.com/rjfranssen
- frifranssen.io

in linkedin.com/in/rifranssen/

LANGUAGE SKILLS

| SQL |
|--------|
| R |
| Python |
| Bash |
| Linux |
| ArcGIS |

Made with the R package pagedown.

The source code is available on github.com/rjfranssen/cv.

Last updated 2020-11-17.

2012 2010

Commercial Casualty Claims Associate

Nationwide Mutual Insurance Company

Harrisburg, PA

· Interviewed policyholders, claimants, witnesses, and police, to gather information to settle commercial losses.

2010 2008

Personal Markets Claims Associate

Liberty Mutual Insurance Company

Palue Bell, PA

· Investigated bodily injury claims; evaluated patient treatment data, collaborated with defense counsel, created litigation strategies, attended trials, and negotiated injury settlements up to \$100,000.



INDEPENDENT COURSEWORK

2014 2014

Master's Thesis: Evaluating Spatial Changes in the Rate of Insurgency Violence in Central Africa: The Lord's Resistance Army 2008-2012

- · Analyzed the spatial distribution of LRA-perpetrated armed-conflicts and performed statistical analysis (heat mapping, regression, difference-indifferences) to evaluate regional rates of change and correlative variables.
- · Provided brief to the Invisible Children NGO to supplement their regional initiatives in the Dem. Rep. of Congo.

2013 2013

Iraqi Health Metrics Web-map Interface

· Created an interactive web application to demonstrate trends in Iraqi public health metrics using CartoDB and open-source GIS resources. Administered an Amazon EC2 instance and published embedded web applications using ArcGIS Server and API.

2013 2013

Elephant Habitat Risk Modeling

- · Created several Arc-based tools to track risks to elephant populations in the Dem. Rep of Congo.
- · Wrote Python scripts in ArcPy, created functions for logging poaching activities, and designed algorithms to execute location-density analyses and automatically re-zone elephant habitats to denote varying levels of
- · Provided model framework to the International Union for the Conservation of Nature (IUCN) in Nairobi.

2013 2013

Biological Stream Survey Assessment

· Performed regression analysis on the distribution of Asiatic Clams in Maryland correlating their presence with concentrations of NO2 and Nitrates using Maryland Biological Stream Survey data.



SPEAKING ENGAGEMENTS

2014 2014

Africa: the Lord's Resistance Army 2008-2012 Los Angeles, CA

2013

2013

Modeling Changes in the Frequency of Armed-conflict Events Relative to the Regional Distribution of High-frequency Radios Composing an Earlywarning Network

Evaluating spatial changes in the rate of insurgency-violence in Central

Addis Ababa, Ethiopia

• AfricaGIS 2013 / GSDI 14, Global Geospatial Conference



ACADEMIC WRITINGS

2014 2014 Evaluating spatial changes in the rate of insurgency-violence in Central Africa: the Lord's Resistance Army 2008-2012

USC Digital Library



ACTIVITIES AND INTERESTS

- Researching the Application of Machine Learning Techniques for **Drowning Detection**
 - · Using Tensorflow, I re-trained Google's MobileNet image classification model on a collection of images depicting active- and passive-drowning events. With a successful proof of concept, I'm expanding my training dataset to include a more diverse set of images so I can document my experience researching an Al-based solution for drowning detection.
- **Environment Science**
- **Spatial Economics**

2018 2014 **Swiming Instructor**

Harrisburg, PA

♀ East Shore YMCA

- · I volunteered twice a week and teach Polliwogs, Guppies, and Adulthumans how to swim.
- · I was awarded "Adult Volunteer of the Year" in 2016.



- 1: https://www.nytimes.com/interactive/2016/08/26/us/college-studentmigration.html
- 2: https://livefreeordichotomize.com/2019/06/04/using_awk_and_r_to_parse_25tb/
- 3: https://github.com/nstrayer/shinysense
- 4: http://nickstrayer.me/dataDayTexas/