# FILIPPO FRANCHINI

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

Currently searching for a position that allows me to build tools leveraging a combination of visualization, machine learning, and software engineering to help people explore and understand their data in new and useful ways.



#### **EDUCATION**

2020 2015 PhD. Candidate, Biostatistics

Vanderbilt University

Nashville. TN

- · Working on Bayesian network models & interactive visualization platforms
- · University Graduate Fellow

2015 2011

B.S., Mathematics, Statistics (minor C.S.)

University of Vermont

Burlington, VT

Thesis: An agent based model of Diel Vertical Migration patterns of Mysis diluviana



#### **I** SELECTED POSITIONS

2020 2015 **Graduate Research Assistant** 

TBILab (Yaomin Xu's Lab)

Vanderbilt University

- Primarily working with large EHR and Biobank datasets.
- · Developing network-based methods to investigate and visualize clinically relevant patterns in

2018 2017 **Data Science Researcher** 

Data Science Lab

Johns Hopkins University

- Building R Shiny applications in the contexts of wearables and statistics education.
- Work primarily done in R Shiny and Javascript (node and d3js).

2016

**Data Journalist - Graphics Department** 

**New York Times** 

New York, New York

- · Reporter with the graphics desk covering topics in science, politics, and sport.
- Work primarily done in R, Javascript, and Adobe Illustrator.



## ■ SELECTED WRITING

2019

Using AWK and R to Parse 25tb

LiveFreeOrDichotomize.com

- · Story of parsing large amounts of genomics data.
- · Provided advice for dealing with data much larger than disk.
- · Reached top of HackerNews.

2017

The Traveling Metallurgist

LiveFreeOrDichotomize.com

- Pure javascript implementation of traveling salesman solution using simulated annealing.
- Allows reader to customize the number and location of cities to attempt to trick the algorithm.

2016

The Great Student Migration

The New York Times

Most shared and discussed article from the New York Times for August 2016.



## CONTACT

- **J** +44(0)7503983229
- in LinkedIn
- GitHub
- ResearchGate

## CODING SKILLS

Matlab Python Excel VBA

## **SOFTWARE**

cv: (contributor) Creates awesome data-driven cv's. ascr: (contributor) Maps sound sources using fixed microphone arrays. dshm: (author) Fits two-stage density surface Hurdle models and automates labour-intensive GIS routines. adas: (author, private) Maps sound sources using moving microphone arrays.

## **LANGUAGES**

Italian: Native English: Fluent German: Fluent French: Proficient

> Made w/ pagedown. Source code on my GitHub. Last updated on 2020-05-09.