

# EDUARDO GIRARDI

As a software developer I use my background in data science to build tools to help people explore, understand, and work with their data better. I have made visualizations viewed by hundreds of thousands of people<sup>1</sup>, sped up query times for 25 terabytes of data by an average of 4,800 times<sup>2</sup>, and built packages for R<sup>3</sup> that let you do magic<sup>4</sup>.

## EDUCATION

2020  
|  
2018

### PhD., Biostatistics

Vanderbilt University

Nashville, TN

- Dissertation: Network analysis and visualization for electronic health records data.<sup>5</sup>
- Specialized in creating high-performance interactive visualization platforms
- Developed algorithms for efficient real-time network data processing

2015  
|  
2009

### 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
- Focused on computational efficiency, simulation optimization, and interactive model exploration

## RESEARCH EXPERIENCE

2015  
|  
2013

### Undergraduate Researcher

Rubenstein Ecosystems Science Laboratory

University of Vermont

- Analyzed and visualized data for CATOS fish tracking project.
- Head of data mining project to establish temporal trends in population densities of Mysis diluviana (Mysis).
- Ran project to mathematically model the migration patterns of Mysis (honors thesis project.)

2014  
|  
2013

### Undergraduate Researcher

Bentil Laboratory

University of Vermont

- Developed mathematical model to predict the transport of sulfur through the environment with applications in waste cleanup.

2013  
|  
2012

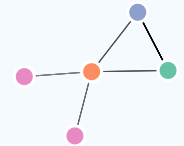
### Research Assistant

Adair Laboratory

University of Vermont

- Independently analyzed and constructed statistical models for large data sets pertaining to carbon decomposition rates.

## INDUSTRY EXPERIENCE



View this CV online with links at [nickstrayer.me/datadrivencv/](http://nickstrayer.me/datadrivencv/)

## CONTACT

✉ [eduardogirardi10@gmail.com](mailto:eduardogirardi10@gmail.com)

🔗 [github.com/eduardogirardi](https://github.com/eduardogirardi)

in

[linkedin.com/in/eduardogirardi10](https://linkedin.com/in/eduardogirardi10)

## LANGUAGE SKILLS

R

Python

C++

Made with the R package [pagedown](https://github.com/jgm/pagedown).

The source code is available on [github.com/nstrayer/cv](https://github.com/nstrayer/cv).

Last updated on 2025-11-11.

While most recently I have had the job title of "software engineer", I have worked in a variety of roles

2023  
|  
2020

## Software Engineer

Posit

📍 Remote

- Part of team who created Shiny for Python, a ground-up rewrite of R's Shiny framework in Python

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.
- Developed interactive, data-dense visualizations viewed by hundreds of thousands of users



## TEACHING EXPERIENCE

2020

### Javascript for Shiny Users

RStudio::conf 2020

- Served as TA for two day workshop on how to leverage Javascript in Shiny applications
- Lectured on using R2D3 package to build interactive visualizations.<sup>6</sup>

2017

### Statistical Computing in R

Vanderbilt Biostatistics Department

📍 Nashville, TN

- TA and lectured
- Covered introduction to R language for statistics applications
- Graduate level class



## SELECTED DATA SCIENCE WRITING

2019

### Using AWK and R to Parse 25tb<sup>8</sup>

LiveFreeOrDichotomize.com

- Achieved 4,800x performance improvement for large-scale genomic data processing.
- Reached top of HackerNews multiple times

2018

### Classifying physical activity from smartphone data<sup>9</sup>

RStudio Tensorflow Blog

- Walk through of training a convolutional neural network to achieve state of the art recognition of activities from accelerometer data.
- Contracted article.

I am passionate about education. I believe that no topic is too complex if the teacher is empathetic and willing to think about new methods of approaching task.

I regularly blog about data science and visualization on my blog LiveFreeOrDichotomize.<sup>7</sup>



## SELECTED PRESS (ABOUT)

2017

### • **Great paper? Swipe right on the new “Tinder for preprints” app<sup>10</sup>**

Science

- Story of the app Papr<sup>11</sup> made with Jeff Leek and Lucy D’Agostino McGowan.

2017

### • **Swipe right for science: Papr app is “Tinder for preprints”<sup>12</sup>**

Nature News

- Second press article for app Papr.



## SELECTED PRESS (BY)

2016

### • **The Great Student Migration<sup>13</sup>**

The New York Times

- Most shared NYT article of August 2016, demonstrating ability to create engaging UIs.
- Used d3.js to realtime render 100 maps for personalized inspection for readers.

2016

### • **Wildfires are Getting Worse, The New York Times<sup>14</sup>**

The New York Times

- GIS analysis and modeling of fire patterns and trends
- Data in collaboration with NASA and USGS



## SELECTED PUBLICATIONS, POSTERS, AND TALKS

2015

### • **Asymmetric Linkage Disequilibrium: Tools for Dissecting Multiallelic LD**

Journal of Human Immunology

- Authored with Richard Single, Vanja Paunic, Mark Albrecht, and Martin Maier.

2015

### • **An Agent Based Model of Mysis Migration<sup>15</sup>**

International Association of Great Lakes Research Conference

- Authored with Brian O’Malley, Sture Hansson, and Jason Stockwell.

2015

### • **Declines of Mysis diluviana in the Great Lakes**

Journal of Great Lakes Research

- Authored with Peter Euclide and Jason Stockwell.



## LINKS

- 1: <https://www.nytimes.com/interactive/2016/08/26/us/college-student-migration.html>
- 2: [https://livefreeordichotomize.com/2019/06/04/using\\_awk\\_and\\_r\\_to\\_parse\\_25tb/](https://livefreeordichotomize.com/2019/06/04/using_awk_and_r_to_parse_25tb/)
- 3: <https://github.com/nstrayer/shinysense>
- 4: <http://nickstrayer.me/dataDayTexas/>
- 5: <https://ir.vanderbilt.edu/handle/1803/16394?show=full>
- 6: [http://nickstrayer.me/js4shiny\\_r2d3/slides](http://nickstrayer.me/js4shiny_r2d3/slides)
- 7: <https://livefreeordichotomize.com/>
- 8: [https://livefreeordichotomize.com/2019/06/04/using\\_awk\\_and\\_r\\_to\\_parse\\_25tb/](https://livefreeordichotomize.com/2019/06/04/using_awk_and_r_to_parse_25tb/)
- 9: <https://blogs.rstudio.com/tensorflow/posts/2018-07-17-activity-detection/>
- 10: <https://www.sciencemag.org/news/2017/06/great-paper-swipe-right-new-tinder-preprints-app>
- 11: <https://jhubiostatistics.shinyapps.io/papr/>
- 12: <https://www.nature.com/news/swipe-right-for-science-papr-app-is-tinder-for-preprints-1.22163>
- 13: <https://www.nytimes.com/interactive/2016/08/26/us/college-student-migration.html?smid=pl-share>
- 14: <https://www.nytimes.com/interactive/2016/07/25/us/wildfire-seasons-los-angeles.html>
- 15: <https://www.semanticscholar.org/paper/An-Agent-Based-Model-of-the-Diel-Vertical-Migration-Strayer-Stockwell/40493c78e8ecf22bd882d17ec99fd913ec4b9820>