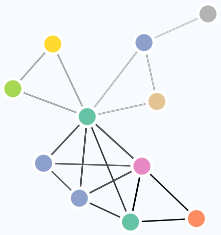
SAM HILLMAN

I have made visualizations viewed by hundreds of thousands of people[1], sped up query times for 25 terabytes of data by an average of 4,800 times[2], and built packages for R[3] that let you do magic[4].

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

current | 2019

PhD. Candidate, Ecology and Evolutionary Biology

University of Edinburgh — Edinburgh, UK

- PhD on 'the ecology of infection and immunity in a wild mouse system' with Amy Pedersen, Simon Babayan and Andy Fenton. Funded through the E4 NERC DTP
- University Graduate Fellow

2019 | 2015

BSc. (Hons) Ecology with a Placement Year

Cardiff University — Cardiff, UK

- Specialising in Infection Biology and Epidemiology, Systems Biology and Modelling, and Global Change Biology.

Dissertation: Low levels of endemic parasite infection reduce the transmission potential of epidemic parasites in co-infected individuals

RESEARCH EXPERIENCE

2019 | 2018

Undergraduate Researcher

CRIPES Group — Cardiff University

- Dissertation research project with Dr. Jo Lello on the effect of endemic co-infection on disease transmission of epidemic parasites. Working in a laboratory system with German cockroaches as a model organism and using collected data to build statistical models of disease transmission.

View this CV online with links at _https://www.samhillman.com/online cv_

CONTACT

- nick.strayer@gmail.com
- NicholasStrayer
- github.com/nstrayer
- nickstrayer.me
- linkedin.com/in/nickstrayer

LANGUAGE SKILLS

- R
- Javascript (d3.js)
- C++
- Python
- Bash
- SQL
- AWK

*Made with the R package **pagedown**.*

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

Last updated on 2020-06-21.

2018 | 2017

Research Assistant

Ezenwa Lab — University of Georgia

- Placement year as a Research Intern with Professor Vanessa Ezenwa, working on an independent project on “The effects of anthelmintic treatment on non-target parasites in wild rodents” and assisting on a project on the causal relationship between personality and parasitism in wild rodents.

Work included extensive trapping and handling of wild cotton rats and administration of behavioural assays, administration of anthelmintic drugs, collection of blood and faecal samples, and the processing and reading of faecal samples for parasite egg and oocyst intensity counts. Completed dissection and extraction of GI tract parasites and statistical analysis with R.

2015 | 2013

Undergraduate Researcher

Rubenstein Ecosystems Science Laboratory — University of Vermont

- Work included extensive trapping and handling of wild cotton rats and administration of behavioural assays, administration of anthelmintic drugs, collection of blood and faecal samples, and the processing and reading of faecal samples for parasite egg and oocyst intensity counts. Completed dissection and extraction of GI tract parasites and statistical analysis with R.
- 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.)

INDUSTRY EXPERIENCE

2014 | 2014

Software Engineering Intern

Conduce — Carpinteria, CA

- Incorporated d3.js to the company’s main software platform.

I have worked in a variety of roles ranging from journalist to software engineer to data scientist. I like collaborative environments where I can learn from my peers.

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.[5]

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.

SELECTED DATA SCIENCE WRITING

I regularly blog about data science and visualization on my blog LiveFreeOrDichotomize.[6]

2018

Classifying physical activity from smartphone data[7]

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.

SELECTED PRESS (ABOUT)

2016 | 2016

The Deeper Story in the Data[8]

University of Vermont Quarterly

- Story on my path post graduation and the power of narrative.

SELECTED PRESS (BY)

2016 | 2016

The Great Student Migration[9]

The New York Times

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

SELECTED PUBLICATIONS, POSTERS, AND TALKS

2015 | 2015

Asymmetric Linkage Disequilibrium: Tools for Dissecting Multiallelic LD

Journal of Human Immunology

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

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/
3. https://github.com/nstrayer/shinysense
4. http://nickstrayer.me/dataDayTexas/
5. http://nickstrayer.me/js4shiny_r2d3/slides
6. https://livefreeordichotomize.com/
7. https://blogs.rstudio.com/tensorflow/posts/2018-07-17-activity-detection/
8. https://www.uvm.edu/uvmnews/news/deeper-story-data
9. https://www.nytimes.com/interactive/2016/08/26/us/college-student-migration.html?smid=pl-share