

# BRANDON P. LABBREE

BioSocial Methods Collaborative | Research Center for Group Dynamics |  
Institute for Social Research | University of Michigan | 426 Thompson Street |  
Ann Arbor, Michigan 48104

View this CV online with links at  
[https://github.com/blabbree/CV/tree/main/DataDriven/Labbree\\_CV\\_20221208.pdf](https://github.com/blabbree/CV/tree/main/DataDriven/Labbree_CV_20221208.pdf)

## EDUCATION

- 2016  
|  
2014
- **M.A., Psychology**  
Rutgers University 📍 Camden, NJ
    - Thesis: Accuracy of Gender and Ethnic Labels and Personality Perception As Moderated by Prejudice
    - Advisor: Wayne Chan
  - **B.A., Psychology, Sociology (minor Childhood Studies/Women & Gender Studies)**  
Rutgers University 📍 Camden, NJ
    - Summa Cum Laude (GPA: 3.965)

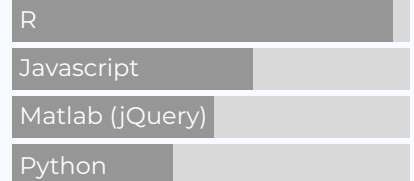
## CONTACT

✉ [blabbree@umich.edu](mailto:blabbree@umich.edu)  
🐦 [blabbree](#)  
🌐 [github.com/blabbree](https://github.com/blabbree)  
in [linkedin.com/in/blabbree/](https://www.linkedin.com/in/blabbree/)  
👤 [@blabbree@tech.lgbt](mailto:@blabbree@tech.lgbt)

## RESEARCH EXPERIENCE

- Current  
|  
September 2021
- **Research Assistant**  
BioSocial Methods Collaborative 📍 Institute for Social Research, University of Michigan
    - Independently analyzed and constructed statistical models for large data sets pertaining to carbon decomposition rates.
  - **Full-time Research Assistant & Lab Manager**  
(PI: Alexander Todorov) 📍 Princeton University
    - Using psychophysical, neuroimaging, and general experimental methods in the lab and online, investigating how people evaluate their environments and how these evaluations shape perceptions, decisions, and interactions.
    - Worked on several projects exploring (among other things):
      - how the distribution of facial features in an environment may bias people's evaluations of others;
      - how people integrate physical appearance and individualizing information in their impressions of others;
      - how people are able to associate affective information with faces and its limitations;
      - how people's mental images of a prototypical group members differ depending upon the label used to describe said group (e.g., labeling immigrants as "illegal" vs. "legal");
    - data-driven models of social perception, and the relative contributions of consensus and consistency in decision making.

## LANGUAGE SKILLS



Made with the R package  
[pagedown](#).

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

Last updated on 2022-12-09.

- 2018  
|  
2017

**Data Science Researcher**

Data Science Lab

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

📍 Johns Hopkins University
  
- September 2016  
|  
September 2014

**Graduate Student Researcher**

(PI: Wayne Chan)

  - Studied the effect of observer personality in person perception and bias using survey-based methods.
  - Worked on projects exploring:
    - how people use stereotypes to judge strangers' personality from minimal external information;
    - how personality predicts the degree people ascribe humanity to the elderly and people with mental illnesses;

📍 Rutgers University, Camden
  
- 2015  
|  
2015

**Human Computer Interaction Researcher**

LabInTheWild (Reineke Lab)

  - Led development and implementation of interactive data visualizations to help users compare themselves to other demographics.

📍 University of Michigan

## SELECTED DATA SCIENCE WRITING

- 2019

**Using AWK and R to Parse 25tb<sup>2</sup>**

LiveFreeOrDichotomize.com

  - Story of parsing large amounts of genomics data.
  - Provided advice for dealing with data much larger than disk.
  - Reached top of HackerNews.
  
- 2018

**Classifying physical activity from smartphone data<sup>7</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.
  
- 2018

**The United States of Seasons<sup>4</sup>**

LiveFreeOrDichotomize.com

  - GIS analysis of weather data to find the most 'seasonal' locations in United States
  - Used Bayesian regression methods for smoothing sparse geospatial data.
  
- 2017

**A year as told by fitbit<sup>5</sup>**

LiveFreeOrDichotomize.com

  - Analyzing a full years worth of second-level heart rate data from wearable device.
  - Demonstrated visualization-based inference for large data.

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

- 2017 ● **MCMC and the case of the spilled seeds<sup>6</sup>**  
LiveFreeOrDichotomize.com
  - Full Bayesian MCMC sampler running in your browser.
  - Coded from scratch in vanilla Javascript.
- 2017 ● **The Traveling Metallurgist<sup>7</sup>**  
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.

## SELECTED PRESS (ABOUT)

- 2017  
|  
2017 ● **Great paper? Swipe right on the new ‘Tinder for preprints’ app<sup>8</sup>**  
Science
  - Story of the app Papr<sup>9</sup> made with Jeff Leek and Lucy D’Agostino McGowan.
- 2017  
|  
2017 ● **Swipe right for science: Papr app is ‘Tinder for preprints’<sup>10</sup>**  
Nature News
  - Second press article for app Papr.
- 2016  
|  
2016 ● **The Deeper Story in the Data<sup>11</sup>**  
University of Vermont Quarterly
  - Story on my path post graduation and the power of narrative.

## SELECTED PRESS (BY)

- 2016  
|  
2016 ● **The Great Student Migration<sup>12</sup>**  
The New York Times
  - Most shared and discussed article from the New York Times for August 2016.
- 2016  
|  
2016 ● **Wildfires are Getting Worse, The New York Times<sup>13</sup>**  
The New York Times
  - GIS analysis and modeling of fire patterns and trends
  - Data in collaboration with NASA and USGS
- 2016  
|  
2016 ● **Who’s Speaking at the Democratic National Convention?<sup>14</sup>**  
The New York Times
  - Data scraped from CSPAN records to figure out who talked and past conventions.

2016  
|  
2016

- **Who's Speaking at the Republican National Convention?<sup>15</sup>**  
The New York Times
  - Used same data scraping techniques as Who's Speaking at the Democratic National Convention?
- **A Trail of Terror in Nice, Block by Block<sup>16</sup>**  
The New York Times
  - Led research effort to put together story of 2016 terrorist attack in Nice, France in less than 12 hours.
  - Work won Silver medal at Malofiej 2017, and gold at Society of News and Design.



## SELECTED PUBLICATIONS, POSTERS, AND TALKS

2020

- **Building a software package in tandem with machine learning methods research can result in both more rigorous code and more rigorous research**  
ENAR 2020
  - Invited talk in Human Data Interaction section.
  - How and why building an R package can benefit methodological research

2020

- **Stochastic Block Modeling in R, Statistically rigorous clustering with rigorous code<sup>17</sup>**  
RStudio::conf 2020
  - Invited talk about new sbmR package<sup>18</sup>.
  - Focus on how software development and methodological research can improve both benefit when done in tandem.

2020

- **PheWAS-ME: A web-app for interactive exploration of multimorbidity patterns in PheWAS<sup>19</sup>**  
Bioinformatics
  - Manuscript detailing application for the exploration of multimorbidity patterns in PheWAS analyses
  - See landing page<sup>20</sup> for more information.

2019  
|  
2019

- **Charge Reductions Associated with Shortening Time to Recovery in Septic Shock<sup>21</sup>**  
Chest
  - Authored with Wesley H. Self, MD MPH; Dandan Liu, PhD; Stephan Russ, MD, MPH; Michael J. Ward, MD, PhD, MBA; Nathan I. Shapiro, MD, MPH; Todd W. Rice, MD, MSc; Matthew W. Semler, MD, MSc.

2019  
|  
2019

- **Multimorbidity Explorer | A shiny app for exploring EHR and biobank data<sup>22</sup>**  
RStudio::conf 2019
  - Contributed Poster. Authored with Yaomin Xu.

- 2019  
|  
2019
- **Taking a network view of EHR and Biobank data to find explainable multivariate patterns<sup>23</sup>**  
Vanderbilt Biostatistics Seminar Series
    - University wide seminar series.
- 2019
- **Patient-specific risk factors independently influence survival in Myelodysplastic Syndromes in an unbiased review of EHR records**  
Under-Review (copy available upon request.)
    - Bayesian network analysis used to find novel subgroups of patients with Myelodysplastic Syndromes (MDS).
    - Analysis done using method built for my dissertation.
- 2019
- **Patient specific comorbidities impact overall survival in myelofibrosis**  
Under-Review (copy available upon request.)
    - Bayesian network analysis used to find robust novel subgroups of patients with given genetic mutations.
    - Analysis done using method built for my dissertation.
- 2018  
|  
2018
- **R timelineViz: Visualizing the distribution of study events in longitudinal studies**  
Under-Review (copy available upon request.)
    - Authored with Alex Sunderman of the Vanderbilt Department of Epidemiology.
- 2017  
|  
2017
- **Continuous Classification using Deep Neural Networks<sup>24</sup>**  
Vanderbilt Biostatistics Qualification Exam
    - Review of methods for classifying continuous data streams using neural networks
    - Successfully met qualifying examination standards
- 2015  
|  
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  
|  
2015
- **An Agent Based Model of Mysis Migration<sup>25</sup>**  
International Association of Great Lakes Research Conference
    - Authored with Brian O'Malley, Sture Hansson, and Jason Stockwell.
- 2015  
|  
2015
- **Declines of Mysis diluviana in the Great Lakes**  
Journal of Great Lakes Research
    - Authored with Peter Euclide and Jason Stockwell.

- 1: <https://livefreeordichotomize.com/>
- 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://blogs.rstudio.com/tensorflow/posts/2018-07-17-activity-detection/>
- 4: <https://livefreeordichotomize.com/2018/02/12/the-united-states-of-seasons/>
- 5: <https://livefreeordichotomize.com/2017/12/27/a-year-as-told-by-fitbit/>
- 6: <https://livefreeordichotomize.com/2017/10/14/mcmc-and-the-case-of-the-spilled-seeds/>
- 7: <https://livefreeordichotomize.com/2017/09/25/the-traveling-metallurgist/>
- 8: <https://www.sciencemag.org/news/2017/06/great-paper-swipe-right-new-tinder-preprints-app>
- 9: <https://jhubiostatistics.shinyapps.io/papr/>
- 10: <https://www.nature.com/news/swipe-right-for-science-papr-app-is-tinder-for-preprints-1.22163>
- 11: <https://www.uvm.edu/uvmnews/news/deeper-story-data>
- 12: <https://www.nytimes.com/interactive/2016/08/26/us/college-student-migration.html?smid=pl-share>
- 13: <https://www.nytimes.com/interactive/2016/07/25/us/wildfire-seasons-los-angeles.html>
- 14: <https://www.nytimes.com/2016/07/26/upshot/democrats-may-not-be-unified-but-their-convention-speakers-are.html>
- 15: <https://www.nytimes.com/2016/07/19/upshot/whos-not-speaking-how-this-republican-convention-differs.html?smid=pl-share>
- 16: <https://www.nytimes.com/interactive/2016/07/14/world/europe/trail-of-terror-france.html>
- 17: [http://nickstrayer.me/rstudioconf\\_sbm](http://nickstrayer.me/rstudioconf_sbm)
- 18: <https://tbilab.github.io/sbmR/>
- 19: <https://academic.oup.com/bioinformatics/advance-article-abstract/doi/10.1093/bioinformatics/btaa870/5922817?redirectedFrom=fulltext>
- 20: [https://prod.tbilab.org/phewas\\_me\\_info/](https://prod.tbilab.org/phewas_me_info/)
- 21: <https://www.ncbi.nlm.nih.gov/pubmed/30419234>
- 22: [http://nickstrayer.me/rstudioconf19\\_me-poster/](http://nickstrayer.me/rstudioconf19_me-poster/)
- 23: [http://nickstrayer.me/biostat\\_seminar/](http://nickstrayer.me/biostat_seminar/)
- 24: [http://nickstrayer.me/qualifying\\_exam/](http://nickstrayer.me/qualifying_exam/)
- 25: <https://www.semanticscholar.org/paper/An-Agent-Based-Model-of-the-Diel-Vertical-Migration-Strayer-Stockwell/40493c78e8ecf22bd882d17ec99fd913ec4b9820>