BRIANNA K. RICHARDSON

(352) 226-7406 * richardsonb@ufl.edu

Website: https://bricha2.github.io/

EDUCATION

University of Florida — **Gainesville, FL**
Ph.D., Computer Science, **GPA: 3.7** — May 2023
Focus Area: Machine Learning

University of Maryland Baltimore County (UMBC) — **Baltimore, MD**
B.S., Bioinformatics & Computer Science, **GPA: 3.6** — May 2018

HONORS/AWARDS

Generation Next Scholar — **Spring 2020 – Spring 2022**
Bridge to Doctorate Fellow — **Fall 2018 – Spring 2020**
Marc U*Star Scholar — **Fall 2016 – Spring 2018**
Meyerhoff Scholar — **Fall 2014 – Spring 2018**

SKILLS

Machine Learning/Data Science: Data Visualization, Predictive Analysis, Clustering & Classification, Data analytics, Web Scraping, Data Mining, Linear/Logistic Regression, Neural Networks, Deep Learning, Graph Theory, Hyperparameter optimization

Programming: Python, R, MATLAB, C/C++, Java, NodeJS, SQL
Applications: GitHub, Bitbucket, Android Studio, MongoDB, Jupyter
Scripting: JavaScript, PHP, HTML, Bootstrap Frameworks

RELEVANT EXPERIENCE

Spotify — **June 2020 – August 2020**
Machine Learning & Algorithmic Bias (Research Intern)
Advisors: Jean Garcia-Gathright, Henriette Cramer, Samuel Way

- Collaborated across the company as an algorithmic bias consultant, assisting teams with fairness concerns in their differing applications of machine learning
- Exposed several teams and employees to new and emerging fairness AI technologies and methods for addressing algorithmic bias
- Conducted a user study measuring the usability and propensity for insight of fairness AI technologies in the workplace
- Utilized findings to conduct a complete fairness assessment on a new company-wide machine learning effort

University of Florida — **June 2018 – Present**
Computer and Information Science & Engineering Department (Research Assistant)
Advisor: Dr. Juan Gilbert

- **Sentiment & Trust in AI**: Collect sentiment on recent advances in Artificial Intelligence (AI) to determine if perspectives of AI and the social impact of AI differ across socio-economic, racial, gender, and/or geographical lines
- **Explainability in AI**: Test the impact user domain knowledge has on AI explainability by measuring the trust individuals have with a simulated machine learning tool that generates mostly incorrect responses with explanations
- **MoDA**: Assist with the creation, implementation, and testing of an in-store Android mobile shopping assistant that advises the user to the products that most meets their requests
- **Fairness in Explainability**: Evaluate Explainable & Interpretable AI's ability to measure metrics of fairness in ML classifiers; test how effective such tools are at identifying fairness with known bias classifiers

University of Maryland, Baltimore County **August 2016 – April 2018**
Department of Biomedical Engineering (intern)
Advisor: Dr. Gregory Szeto

- Uses analytical techniques to normalize and interpret proteomic data from diseased mice with different treatments
- Project the techniques with the best results onto multiscale data to identify networks or biological processes influential in diseases and treatments
- Utilize a plethora of programs, including Treeview, Matlab, several packages in RStudio, and several statistical algorithms featured as add-ins on major applications

ORGANIZATIONS

Alpha Epsilon Lambda Honor Society **Spring 2020 – Current**
National Society of Black Engineers **Fall 2018 – Current**
Black Graduate Student Organization, E-board Member: Historian **Fall 2018 – Current**

PRESENTATIONS, PROCEEDINGS, & PAPERS

Richardson, B., Garcia-Gathright, J., Way, S. F., Thom, J., Cramer, H. (**In Press**). Evaluating tools for Assessing Algorithmic Responsibility Concerns. Paper accepted to *CHI Conference on Human Factors in Computing Systems*.

Richardson, B., Prioleau, D., Alikhademi, K., Gilbert, J. E. (**In Press**). Public Accountability: Understanding Sentiments towards Artificial Intelligence across Dispositional Identities. Paper accepted to *IEEE 2021 International Symposium on Technology and Society*.

Prioleau, D., Richardson, B., Drobina, E., Martin, J., Williams, R., Gilbert, J. E. (**In Press**). How Students in Computing-Related Majors Distinguish Social Implications of Technology. Paper accepted to *Proceedings of the 52nd SIGCSE Technical Symposium on Computer Science Education*.

Prioleau, D and Richardson, B.. (2020). Technological Needs of the Black Collective. Presentation given at *ACM's 2020 Richard Tapia Celebration of Diversity in Computing Conference*, virtual.

Alikhademi, K., Richardson, B., Ross, K., Sung, J., Gilbert, J., Kwon, W.S., Chattaraman, V. (2019). AI-Based Technical Approach for Designing Mobile Decision Aids. In: Stephanidis C. (eds) HCI International 2019 - Posters. HCII 2019. *Communications in Computer and Information Science*, vol 1033, pp. 163–169.

Alikhademi, K., Richardson, B., Martins, J., Chattaraman, V., Kwon, W.S., Gilbert, J. (2019). Systematic Evaluation of a Conversational Voice User Interface for Decision-making. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 63, pp 413-416. 10.1177/1071181319631200.

Sherman, I., Smarr, S., Smith, T., Richardson, B., Gilbert, J. (2018). Exploring Culturally Responsive Game Development. Abstract presented at the annual meeting of the *International Conference on Urban Education*, Nassau, Bahamas.

Alikhademi, K., Mack, N., Ross, K., Richardson, B., Chattaraman, V., Kwon, W.S., Gilbert, J. (2018). Implementing MODA: A Multi-Strategy, Mobile, Conversational Consumer Decision-Aid System. Paper presented at the annual meeting of the *ACM Conference on Computer-Supported Cooperative Work and Social Computing*, Jersey City, New Jersey.