

### Education

MSc Candidate in Bioinformatics,  
Northeastern University, 2023 -  
present

BSc in Psychology (Honors) with a  
minor in Data Science, 2018 - 2022

### Tools/Skills

NGS Pipelines, Data Analytics,  
Statistical Analysis, Data  
Visualization, Reporting, Qualitative  
and Quantitative Research,  
Computational Pipelines, Data  
Engineering, Dimension Reduction,  
Python, R, SQL, SPSS, Qualtrics,  
Excel, Linux, C++, Amazon Web  
Services

### Honors/Awards

Srinivasan Family Award, Dec 2023

Center for Emerging Markets,  
Northeastern University

Provided a grant to develop  
open-source research tools for  
processing and analyzing  
neuroimaging data in emerging  
markets.

Avrom Aaron Leve Memorial Award,  
May 2022

Selected as award recipient in  
recognition of academic  
achievements, personal character,  
and commitment to service.

Dept of Psychology  
Faculty-Selected Senior Award, May  
2022

Selected by faculty of Northeastern  
Dept of Psychology in recognition of  
academic achievements for  
graduating seniors.

Honors in Psychology, May 2022

Completed undergraduate honors  
thesis with applications in  
psychology and cognitive  
neuroscience under supervision of  
Juliet Davidow, PhD.

### Professional Organizations

Ernest E. Just Society Steering  
Committee Member

## Key Qualifications

### Experience

#### Director of Finance, Black In Neuro (2023-present)

- I currently serve on the Board of Directors where I oversee financial planning and reporting for the non-profit organization.

#### Health Data Scientist, Guidehouse (2024-present)

- Developed and optimized data pipelines for multi-modal biological datasets (e.g., genomic, clinical, and surveillance data) using PySpark, PySQL, and Databricks to support large-scale model training
- Authored and maintained SOPs and technical documentation to ensure reproducibility and alignment across data science, engineering, and scientific teams
- Authored and maintained SOPs and technical documentation to ensure reproducibility and alignment across data science, engineering, and scientific teams
- Led design and implementation of statistical and machine learning models for biomedical research, supporting tasks like classification, prediction, and exploratory analysis
- Provided technical leadership in Python and R, offering guidance on model development, performance tuning, and integration of heterogeneous biological data sources

#### Market Research Analyst, RaceTrac (2023-2023)

- Analyze key drivers for performance metrics including market share, profit margins,

and customer retention

- Query sales data using Microsoft SQL Server, manage data pipelines and provide segmentation analyses
- Build dashboards, analytics, and data visualizations in Power BI to track and report KPIs

#### **Reporting and Finance Lead, Black In Neuro (2021-2023)**

- Developed donor tracking, sponsor solicitation, and stakeholder communication strategies with Development and Finance Directors
- Reported engagement, impact metrics, and funding for external partners and internally
- Led the annual impact report for the organization for 2+ years

#### **Research Fellow, Learning and Brain Development Lab at Northeastern University (2021-2022)**

- Conducted behavioral and network analysis of brain connectivity for clinical data
- Analyzed data using Python, R, and CONN packages for hypothesis testing, analysis of variance, and regression
- Collaborated with PENLab scientists and presented findings at RISE conference

#### **UX Researcher/Data Analyst, Autodesk (2022-2023)**

- Developed interactive dashboards using Qualtrics XM to visualize survey results and analytics for stakeholders
- Performed advanced statistical and text analysis using 1M+ data points of open-ended survey responses
- Conducted product usage analytics and statistical modeling (regression, cluster analyses, hypothesis testing)
- Presented analytics and research recommendations to product teams to influence early product development roadmaps

#### **UX Researcher, Insulet (2021-2021)**

- Conducted formative and summative user research to improve medical device outcomes
- Provided recruiting, study planning, and analytics for moderated

usability studies and surveys leveraging Qualtrics for data management, analysis, and user panels

- Analyzed qualitative and quantitative data using UX metrics and statistical analysis for wearable device/controller app
- Developed data driven insights and recommendations in a cross-functional team

#### **Market Research Assistant, DATA Lab at Northeastern University (2021-2022)**

- Created and aggregated usage data reports for television, media, and consumer products
- Planned study materials and experimental design for research
- Developed practices to improve consumer perception of data security, algorithmic, and digital experience design

#### **Research Assistant, Dept of Psychology at Northeastern University (2018-2019)**

- Lead data collection for new and existing research studies
- Develop study protocols for experimental design
- Processed data entry, data coding, and statistical measurements
- Coded and synthesized transcripts of qualitative data

### **Conference Presentations**

Dukes, A., Murray, D., Kelly, C., Greenwood, P., Tesfaye, R., Dominguez, E., **McCray, V.**, & Liu, C. (November 2023) How I Survived Grad School: Perspectives from Black In Neuro. Professional Development Workshop. Society for Neuroscience 2023.

**McCray, V.** (April 2022) Effects of Cannabis for Persons with Schizophrenia: Implications for Reward Processing. Research, Innovation, and Scholarship (RISE) Expo Poster Session.

Haigler, C., Andan, Q., **McCray, V.**, Platt, M., & Berent I. (April 2019) Language in the Mind's Eye: Verbal Morphological Conditioning. Research, Innovation, and Scholarship (RISE) Expo Poster Session.

**McCray, V.** (April 2019) Humor as an Identity Marker: Language Attitudes of African American Vernacular English. Undergraduate Linguistic Research Poster Session.

**McCray, V.** (April 2019) A Grammar Sketch of Bari: The Hidden Tongue of South Sudan. Undergraduate Linguistic Research Poster Session.