

VICTORIA MCCRAY

Biomedical & Community Health Data Scientist

victoriapmccray@gmail.com • Atlanta, GA • victoriapmccray.github.io • [LinkedIn](#) • [GitHub](#)

Biomedical and Community Health Data Scientist with 5+ years of experience developing statistical, machine learning, and AI solutions across public health, healthcare, biotechnology, and digital health. Experienced using Python, R, SQL, and cloud technologies to translate complex data into actionable insights.

EDUCATION

Master of Science, Bioinformatics | Northeastern University May 2026
Focus: Neuroimaging & Biomedical Data Science, Bioinformatics Pipelines, ML Evaluation

Bachelor of Science, Psychology (Honors) | Northeastern University May 2022
Minor: Data Science

PROFESSIONAL EXPERIENCE

Public Health AI & Data Scientist II | Guidehouse (Supporting the CDC) Feb 2024 – May 2026 | Atlanta, GA

- Architected enterprise data infrastructure (PySpark/Databricks) processing 11M+ records for national overdose surveillance across 54 jurisdictions
- Designed and deployed transformer-based recommendation system (OpenAI API) for automated document analysis, reducing manual research time
- Designed and formatted 15+ data visualizations for two peer-reviewed manuscripts on national Parkinson's Disease and Multiple Sclerosis prevalence using clinical surveillance data
- Led responsible AI adoption strategy via curriculum, use cases, and governance frameworks for C-suite leadership
- Established Python/R SME technical standards with Git workflows and code review for production QA

Market Research Analyst | RaceTrac July 2023 – Nov 2023 | Atlanta, GA

- 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

UX Researcher / Data Analyst | Autodesk Feb 2022 – Apr 2023 | Boston, MA

- Designed product usage analytics framework (Looker, Qualtrics XM) surfacing user segments and feature adoption patterns for product leadership
- Led NLP and statistical modeling (regression, clustering) on 1M+ survey responses to directly influence product roadmap

UX Researcher | Insulet Corporation Jan 2021 – Jun 2021 | Billerica, MA

- Designed and analyzed A/B user tests for a wearable medical device and automated insulin controller app
- Managed full usability study lifecycle including statistical analysis and Qualtrics platform reporting

RESEARCH EXPERIENCE

Founder & Lead Facilitator | Open Science Neuro Hackathon Feb 2025 | Lilongwe, Malawi

- Founded international neuroimaging and data science program for 30+ graduate students and faculty, teaching Python and computational neuroscience in resource-limited settings
- Facilitated curriculum on biomedical imaging AI including medical image classification, tumor detection from sMRI scans, and CNNs for diagnostic imaging
- Contributed documentation improvements to nilearn, an open-source Python library for neuroimaging analysis

Research Fellow | Learning & Brain Development Lab, Northeastern University Sep 2021 – May 2022 | Boston, MA

- Conducted behavioral and network analysis of brain connectivity in clinical datasets using Python, R, and CONN toolbox for functional connectivity analysis
- Performed hypothesis testing, ANOVA, and regression to investigate cognitive and neurological development in psychiatric populations
- Developed computational pipelines for processing and analyzing fMRI data from clinical datasets

PUBLICATIONS & PRESENTATIONS

McCray, V. Barriers to Patient Agency in Health Insurer Privacy Policies: A Document Analysis of Readability, Data Sharing, and Consent Mechanics. SocArXiv, 21 July 2026, osf.io/preprints/socarxiv/7hd4m_v1.

McCray, V.P., Dukes, A., Pittman, Nikea. Community-Driven Programming to Strengthen STEM Conference Experiences: A First Look at BlackInNeuro and BlackInMicro Event Outcomes. Oxford Open Neuro. (in press, 2026).

Makwakwa, D., McCray, V.P. (2026). Community-Based Digital Screener for Early Dementia Detection in Malawi. Alzheimer's Association International Conference. London, UK.

Contributor. CDC. Drug Overdose Surveillance and Epidemiology Discharge Surveillance (DOSE-DIS) System: Nonfatal Overdose Emergency Department and Inpatient Hospitalization Discharge Data. US Department of Health and Human Services, CDC; 2024.

SERVICE & LEADERSHIP

Ethics Reviewer NeurIPS	2026 – Present
• Provide feedback to the program committee regarding risks and harms of submitted work in line with the NeurIPS Code of Ethics	
Director of Finance Black In Neuro	2023 – 2026
• Directed financial planning and impact reporting for the international 501(c)(3) nonprofit supporting Black neuroscientists across 40+ countries with a \$150K annual funding portfolio • Increased funding diversification 35% through donor tracking, in-kind support, and strategic sponsor outreach	

TECHNICAL SKILLS

AI & ML: Python/PySpark, R, scikit-learn, XGBoost, random forest, OpenAI API, LLM applications

Cloud & Data: Azure Databricks, Snowflake, Azure AI Foundry, Microsoft SQL Server, GitHub

Visualization: Power BI, Power Platform, Plotly, ggplot2

Methods: Program evaluation, survey design, statistical modeling, regression, ANOVA, clustering, NLP, A/B testing

Domain Specialties: Public health surveillance, Epidemiology, Neuroimaging, Biomedical imaging, Behavioral science, Product analytics, Clinical data