# John Brown

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Data professional with experience in statistical analysis using R and Python. Proficient in data manipulation using SOL, scientific presentations, data governance, and problem-solving.

# **EDUCATION**

Master of Science in Analytics		
Institute for Advanced Analytics,	NC State University, Raleigh, M	NC

**Bachelor of Science in Biology, Minor in Chemistry** University of North Carolina at Chapel Hill, Chapel Hill, NC

### **MASTER'S PRACTICUM PROJECT**

#### **United States Department of Education**

Technical Lead

August 2023-May 2024

- Implemented KNN techniques to construct social networks based on FAFSA data
- Delivered well-documented **Python code**, used to create network data for 45 million+ students.
- Estimated the effect of one's social network on 5 long-term student outcomes using logistic regression, • extreme gradient boosting, and neural networks.

#### WORK EXPERIENCE

#### **United States Department of Veterans Affairs**

Statistician (medicine)

Construct patient cohorts and provide statistical support for research projects using **R** and **SQL**. Manage large healthcare datasets, ensure data integrity, and develop statistical analysis plans. Provide technical guidance on database structure, project feasibility, and research protocols to VA researchers and physicians.

- Created analysis plan in collaboration with the study team for a project investigating PTSD evidence-
- based psychotherapy. Used SQL to create a retrospective dataset of 1.5 million Veterans from EHR. • Collaborate with statisticians and the study team to set up a clinical trial in **REDCap**, proactively
- preparing for recruitment of 240 Veteran care-partner dyads.
- Assist in Institutional Review Board submission, develop the statistical analysis plan, and identify key data sources for a diabetes study using 20,000 Veterans' EHR data.

#### University of North Carolina at Chapel Hill School of Medicine

Research Technician - Journey

Designed and executed experiments and communicated results. Collaborated with lab members and UNC faculty members, kept meticulous documentation, stayed informed about relevant research, created presentations and posters, wrote manuscripts, and conducted statistical analyses.

- Designed bioinformatics experiments and processed high-dimensional RNA-seq data using UNC's Linux-based computing cluster.
- Performed statistical analysis using generalized linear models in **R**, on 800 million+ data points.
- Authored 3 publications and delivered 5 scientific conference presentations.

## **PUBLICATIONS**

- John C. Brown, Benjamin D. McMichael, Vasudha Vandadi, et al., Lysine-36 of Drosophila histone H3.3 supports adult longevity, G3 Genes|Genomes|Genetics, (2024).
- Harmony R. Salzler, Vasudha Vandadi, Benjamin D. McMichael, John C. Brown, et al., Distinct roles for canonical and variant histone H3 lysine-36 in Polycomb silencing, Science Advances, (2023).
- Casey A. Schmidt, Lucy Y. Min, Michelle H. McVay, Joseph D. Giusto, John C. Brown, Harmony R. Salzler, A. Gregory Matera. Mutations in Drosophila tRNA processing factors cause phenotypes similar to Pontocerebellar Hypoplasia, Biology Open (2022).

Washington, D.C.

Durham, NC October 2024—Present

Chapel Hill, NC

August 2020—January 2023

May 2024

August 2020