

EDUCATION

University of Colorado, Denver

Denver, CO

Expected Graduation: May 2026

- Statistics M.S

Miami University

Oxford, OH

Graduation: May 2024

- Data Science and Statistics B.S, Biology B.S
- Neuroscience Co-Major, Bioinformatics Minor, Computer Science minor

EXPERIENCE

Computational Genomics Research Fellow

University of Colorado Anschutz Medical Campus

08/12/2024 - present

- Dry Lab Rotation with Arjun Krishnan, PhD:
 - Improved on existing model by implementing an ordinal regression neural network that predicts chronological human age using RNAseq data.
 - Construct similar models using brain wave data. Performed extensive feature engineering and time series analysis on the raw brain wave data.
- Dry Lab Rotation with Joanne Cole, PhD:
 - Performed a genome wide association study (GWAS) to find genetic determinants to whether someone had the trait of being a fast versus slow ager.
 - Constructed the fast/slow ager dataset by building a neural network model that predicts age using OLINK proteomic data.
- Dry/Wet Lab Rotation with David Bentley, PhD:
 - Implemented peak calling algorithms to identify statistically significant binding sites in RNA under fast and slow RNA polymerase conditions.
 - Applied nonparametric signal analysis to quantify differential binding patterns.

Research Paper Visualizer App - <https://medium.com/p/af40298adf4e>

- Semantic clustering of 15000 publications.
- Helps a user understand the landscape of published research on a particular topic, and to more easily identify publications that are of interest, or that have been highly influential
- Interactive RShiny dashboard

AWARDS

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- First Place - ASA DataFest 2024
 - Over 3 days, my team conducted an analysis of a complex set of student data files given by the CourseKata learning platform, before presenting for a panel of judges.

CERTIFICATIONS

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- SAS Associate: Programming Fundamentals Using SAS 9.4