Manishika Balamurugan

mbala@umich.edu | (402) 601-9030 | Ann Arbor, MI

Education	**Bachelor of Science with Honors** (GPA: 4.0) **August 2023 - Present**

Education

Bachelor of Science with Honors (GPA: 4.0)   **August 2023 - Present**
Major: Biopsychology, Cognition, & Neuroscience. Minor: Computer Science.
University of Michigan- Ann Arbor
Relevant Coursework: Intro Behavioral Neuroscience. Intro Cognitive Psychology. General Chemistry. Molecular, Cellular, and Developmental Biology. Statistics and Data Analysis. Elementary Programming Concepts. Programming and Data Structures. Discrete Mathematics.
Anticipated Graduation Date: May 2027

Lincoln High School*   **August 2019 - May 2023**
International Baccalaureate Program (GPA: 4.493)
Thesis: *To what extent is prejudice developed in early childhood as a result of implicit racial bias?*
Senior Psychological Research Paper: *An Experiment Investigating the Effects of Conflicting Stimuli on Information Processing (Replication of Stroop, 1935)*
*Dual enrolled at the University of Nebraska-Lincoln (GPA: 4.0)   **August - December 2022**

Research

Regenerative Imaging Laboratoratory   **May - August 2025**
Research Fellow, University of Pittsburgh
- Working under Dr. Mike Modo, conducting research to model the hippocampus and its connectivity using diffusion MRI data and tractography methods.

Computational & Cognitive Neuroscience Lab   **August 2024 - present**
Research Assistant, University of Michigan
- Working under Dr. Thad Polk, conducting research regarding neural dedifferentiation in healthy vs MCI older adults.
- Responsible for participant screening, behavioral data entry, MRI data processing using Freesurfer, MRS quality control.
- Led project on training and implementing an AI assistant into lab.
- Presented at Undergraduate Research Opportunity Symposium in April 2025.

Awards

University Honors   **2023, 2024**

Shining Student Tackling Advanced Research   **April 2024**
Awarded to scholars who takes initiative in building their research skills.

Extracurriculars

Nu Rho Psi   **September 2024 - present**
University of Michigan Chapter of National Honors Society of Neuroscience.

Michigan Data Science Team   **January 2024 - April 2025**
Participated in multiple semester-long projects focused on real-world problem solving and collaborative analysis.

Work Experience

Literacy Tutor   **October 2023 - April 2024**
Bright Futures Schools in Ypsilanti, MI
Planned curricula for groups of students at different English language levels to enhance literacy skills through one-on-one reading, comprehension problem sets, and encoding/decoding activities.

Projects

Flight Price Prediction App
Streamlit app showcasing a machine learning model using scikit-learn to predict flight prices using historical data.

Skills

Freesurfer, DSI-Studio, R, C++, Python (NumPy, Pandas)