# ELHADJI AMADOU TOURE

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#### **EDUCATION**

Carleton College, Northfield, MN

*September 2021 – June 2025* 

Bachelor of Arts: Major & Minor: Computer Science; Biochemistry

GPA: 3.70/4.00

Coursework: Artificial Life and Digital Evolution; Data Structures; Human-Computer Interaction; Mathematics of Computer

Science; Algorithms; Computer Security; Computer Systems; Programming Languages.

August 2023 – December 2023

Aguincum Institute of Technology (BME Subsidiary), Budapest, Hungary Coursework: Computational Biology & Medicine; Computing Theory; Scalable Systems & Development Processes, UX Design.

GPA: 5.00/5.00

#### **EXPERIENCE**

### Mass General Brigham, Boston, MA

June 2024 - Present

Medical Practice Evaluation Center Intern

- Applying unsupervised learning (clustering) techniques using Python, R, and Scikit-learn to analyze cardiometabolic disease data from the Bangladesh STEP survey, working with a dataset of over 8,000 data points.
- Conducting high-impact analyses identifying correlations between living conditions, education levels and specific comorbidities, as well as correlations between different comorbidities.
- Delivered a preliminary presentation to policymakers, where clusters of trends were assigned to specific regions, guiding resource allocation strategies in low- and middle-income counties.

### Perception Laboratory at Carleton College, Northfield, MN

January 2023 – Present

Research Assistant

- Conducting experiments on the human brain's speech perception, accuracy, and identifiability in challenging listening conditions, particularly in background noise, using R for data analysis.
- Quantified speech perception accuracy by developing a statistical model that measured recognition rates of spoken words in varying noise environments, revealing that recognition accuracy dropped by 20% as background noise intensity doubled.
- Contributed to the enhancement of cognitive models by validating a new auditory processing theory, improving the predictive accuracy of speech perception models by 15%.

### Mayo Clinic, Rochester, MN

June 2023 - May 2024

Medical Oncology Intern, Department of Otolaryngology-Head and Neck Surgery

- Developed and maintaining a web application for patient prognosis using Flutter and Dart (myelomarisk.com), allowing patients and physicians to input lab results and receive prognosis predictions, including cancer survival rates and life expectancy, based on Mayo Clinic research.
- Rapidly learned Flutter and Dart within three weeks to build the web application, which has since been adopted by physicians, enhancing trust in prognosis tools and increasing patient-physician interaction time.

# Project Friendship, Northfield, MN

App Developer / Computer Programmer Student Worker

February 2023 - June 2023

- Implemented key features in the organization's mobile application, including mass mail sending, an emergency alert button for missing mentees, and a messaging system between mentors and mentees' parents.
- Utilized Docker (Go) to streamline the development process, enhancing communication among mentors, improving event awareness, and ensuring the safety of mentees through a robust alert system.

### LEADERSHIP EXPERIENCE

# Carleton College, Northfield, MN

August 2022 - Present

August 2022 – Present

Residential Assistant

- Foster a safe, fun, and inclusive environment for all residents in assigned dorm community.
- Advise 42 residents for 2 years by connecting them to campus resources to aid in their adjustment to life on campus.

Introduction to Computer Science Mentor

*January* 2023 – *March* 2023

Coached and mentored students for homeworks and exam preparations an Introductory Computer Science course.

#### Thrive Scholars, Scholar & Ambassador

April 2020-Present

Selected as one of 90 out of 2400 applicants to participate in a 6-year college access, college success, & professional development program for high achieving, underrepresented, low-income first-generation students.

# SKILLS, LANGUAGES, & AWARDS

Skills & Languages: Flutter; Python; Java; C++; GitHub; R Studio; Microsoft Excel; Figma; Native in French and Wolof. Awards: Roy F. Grow Fellowship for a Significant Student Experience in Asia; QuestBridge National College Match Scholar.