

# ELHADJI AMADOU TOURÉ

[etoure33@gmail.com](mailto:etoure33@gmail.com) • <https://www.linkedin.com/in/elhadjiatoure> • [amadoutoure.com](http://amadoutoure.com) • <https://github.com/eatoure>

## EDUCATION

<b>Carleton College</b> , Northfield, MN	<b>September 2021 – June 2025</b>
<i>Bachelor of Arts: Major &amp; Minor: Computer Science; Biochemistry</i>	<b>Program GPA: 3.67/4.00</b>
<b>Coursework:</b> Genes, Evolution, and Development; Artificial Life and Digital Evolution; Principles of Psychology; General Chemistry I & II; Organic Chemistry I & II; Climate Change and Human Health; Energy Flow in Biological Systems; Data Structures; Human-Computer Interaction; Mathematics of Computer Science; Algorithms; Introduction to Biochemistry; Computer Systems; Mechanics and Waves; Computer Security; Programming Languages; Data Visualization; Electricity and Magnetism; Francophone Literature of Africa and the Caribbean.	
<b>Senior Thesis:</b> <a href="#">Implementing, Analyzing, and Defending Against Password Spraying Attacks on HTTP-Based Authentication Systems</a>	
<b>Aquincum Institute of Technology (BME) Study Abroad</b> , Budapest, Hungary	<b>August 2023 – December 2023</b>
<b>Coursework:</b> Computational Biology & Medicine; Computing Theory; Scalable Systems & Development Processes; UX Design	
	<b>GPA: 5.00/5.00</b>

## WORK EXPERIENCE

<b>Baltimore Health Analytics</b> , MN, Hybrid	<b>March 2025 - Present</b>
<i>Data Scientist, Minneapolis, MN, Hybrid</i>	<i>August 2025 - Present</i>
<ul style="list-style-type: none"><li>Delivering forecasting models (Holt-Winters, SARIMAX) that are driving a 6% boost in client Star performance and secured \$80K in annualized revenue through renewals and upsells.</li><li>Defining KPIs linking predictive insights to measurable ROI, strengthening client adoption of analytics tools.</li><li>Alongside prior responsibilities, scaling internal platforms (70M+ rows) with React, Python (Flask), SQL, Snowflake, Teradata, and Apache Echarts.</li></ul>	
<i>Associate Data Scientist, Minneapolis, MN, Hybrid</i>	
<i>June 2025 – August 2025</i>	
<ul style="list-style-type: none"><li>Built production-ready forecasting pipelines that informed client strategy and generated \$70K in new revenue through a contract renewal.</li><li>Alongside prior responsibilities, formalized Git workflows (through Bitbucket) and Jira sprint planning, improving reliability and delivery speed.</li></ul>	
<i>Data Science Intern, Northfield, MN, Hybrid</i>	<i>March 2025 – June 2025</i>
<ul style="list-style-type: none"><li>Developed machine learning models to predict CMS Star Ratings across 800K+ rows, accelerating performance evaluation.</li><li>Co-led client-facing dashboard development and spearheaded full website redesign to modernize UI/UX and responsiveness.</li><li>Quickly mastered Star rating methodology, surfacing new opportunities for data accessibility and decision support.</li><li>Co-led startup's full-stack development of internal analytics tools for Plan C and Plan D clients, using React, Python (Flask), SQL, Teradata, and Apache ECharts for rich interactive data visualizations.</li></ul>	

## RESEARCH EXPERIENCE

<b>Harvard Medical School - Mass General Brigham</b> , Boston, MA	<b>June 2024 – June 2025</b>
<i>Infectious Diseases and Global Health Intern</i>	
<ul style="list-style-type: none"><li>Through the Medical Practice Evaluation Center (MPEC), conducting research in epidemiology and global health in low- and middle-income countries; selected as 1 of 11 fellows from over 1000 applicants.</li><li>Applying machine learning techniques (unsupervised and supervised) and analyzing cardiometabolic disease data using over 8000 data points from a Bangladesh STEP survey.</li><li>Contributing to high-impact analyses on health system performance and socio-economic impacts, aiding data democratization, and informing policymakers.</li><li>Developing data management and analysis skills using Python, Pandas, and Dask.</li></ul>	
<b>Perception Laboratory at Carleton College</b> , Northfield, MN	
<i>January 2023 – June 2025</i>	
<i>Research Assistant</i>	
<ul style="list-style-type: none"><li>Develop and conduct research experiments on the cognitive processes supporting speech perception in challenging listening conditions and the mechanisms underlying audiovisual integration.</li><li>Research topics including the influence of expectations and contextual information on spoken word recognition and the role of individual difference factors in spoken word recognition abilities.</li><li>Explore the quantification and mathematical modeling of the processes underlying spoken word recognition.</li></ul>	

# ELHADJI AMADOU TOURÉ

[etoure33@gmail.com](mailto:etoure33@gmail.com) • <https://www.linkedin.com/in/elhadjiatoure> • [amadoutoure.com](http://amadoutoure.com) • <https://github.com/eatoure>

**Mayo Clinic**, Rochester, MN

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

**June 2023 – May 2024**

- Selected as 1 of 9 out of 50 applicants for a medical oncology position at Mayo Clinic, Rochester
- Using Flutter and Dart, developing a [web application](#) assisting patients in determining their prognosis of smoldering multiple myeloma, multiple myeloma, monoclonal gammopathy of undetermined significance (MGUS), etc.
- Participating in two pivotal research projects: ‘A Mixed Method Approach to Explore Successful Recruitment and Treatment of Minority Patients on Therapeutic Cancer Clinical Trials at Mayo Clinic’ and ‘Comparison of Qualitative and Quantitative Dual-Energy CT and Whole-Body MRI Parameters for Longitudinal Monitoring of Bone Involvement in Patients with Multiple Myeloma.
- Gained hands-on experience in clinical and surgical patient care, pediatric ENT, cardiology, anesthesiology, Trauma and Critical Care, healthcare disparities, resident lectures, grand rounds, and conference presentations.
- Hosted simulations at Carleton College under Walter Franz III, M.D.’s guidance to train pre-medical students in healthcare disparities, street, and emergency medicine through interactive learning modules.

**Climate Change and Human Health**, Northfield, MN; Addis Ababa, Ethiopia

*Chemistry and Environmental Studies Study Abroad Program*

**September 2022 – March 2023**

- Evaluated the emissions, composition, and combustion characteristics of selected blended fuel pellets to reduce users' chances of indoor PM2.5 particle inhalation.
- Analyzed the role of pellet quality and cooking practices in the performance of cookstoves in Addis Ababa, Ethiopia.

## HEALTHCARE EXPERIENCE

---

**Mayo Clinic Alix School of Medicine**, Rochester, MN

*Pre-Medical Intern and Mentee*

**October 2022 – April 2023**

- Selected for mentorship and internship program for pre-medical students of minority and disadvantaged backgrounds.
- Interactive and simulation-based learning and career navigating resources in medicine through clinical and surgical simulations engagements while participating in mentor-mentee interaction and small group community service projects.

**Cabinet Médical de Médecine Générale | Clinique Cardiologique**, Dakar, Sénégal

*Clinical Intern*

**July 2022 – August 2022**

- Underwent training, assisted, and shadowed family, enterprise, and sports medicine physicians.
- Collected and meticulously documented patients' blood pressure, temperature, and glucose levels.
- Shadowed primary care physicians and interventional cardiologists consulting patients with various pathologies.

## COMPUTER SCIENCE / TEACHING EXPERIENCES

---

**Carleton College**, Northfield, MN

*French Teaching Assistant ~ French and Francophone Studies Department*

**January 2023 – June 2025**

**September 2024 – June 2025**

- Support students by proofreading written assignments according to professor-established guidelines and answering grammar-related questions.
- Provide additional practice exercises to enhance grammar, vocabulary, pronunciation, writing, speaking, reading, and listening skills.
- Assist students in locating and utilizing various educational resources and engaging in conversational practice to boost their French language proficiency.
- Teach required courses on Tuesdays and Thursdays, ensuring a comprehensive understanding and application of the language.

*Introduction to Computer Science, Algorithms, & Theory of Computing T.A.*

**January 2023 – March 2025**

- Coached and mentored students in introductory Computer Science and algorithms courses.
- Held teaching assistant sessions where fundamental computer science concepts and complexity were discussed.
- Taught students the fundamentals of computability and complexity in Computer Science.
- Mentored students through exam preparation.

# ELHADJI AMADOU TOURÉ

[etoure33@gmail.com](mailto:etoure33@gmail.com) • <https://www.linkedin.com/in/elhadjiatoure> • [amadoutoure.com](http://amadoutoure.com) • <https://github.com/eatoure>

## Project Friendship, Northfield, MN

*App Developer / Computer Programmer Student Worker*

**February 2023 – June 2023**

- Worked independently on app development with the guidance of a professional developer for Project Friendship, a Northfield non-profit organization that provides youth mentoring.
- Completed and refined mobile application implementation for college-student mentors, parents of young mentees, the Project Friendship organization, and potential mentees to support the organization's youth mentoring mission.
- Offered creative ideas/solutions to the development and function of applications.

## RESEARCH PRESENTATIONS

### Machine Learning-Based Clustering of Chronic Disease Risk Factors in Bangladesh

- SNMA Annual Medical Education Conference (AMEC) – Wilbert C. Jordan Research Forum (WCJRF), St. Louis, MO, April 2025
- Delivered an oral presentation on unsupervised learning applied to cardiometabolic disease clustering in a Bangladesh STEP survey dataset.
- One of only two undergraduates selected to present at WJRCF; recognized among the **top 10 highest-scored abstracts** from over 3,000 pre-medical and medical student participants.

### Audiovisual Speech Processing by L1 (“Native”) and LX (“Nonnative”) English Speakers

- Midwestern Psychological Association Conference (MPA), Chicago, IL, April 2025
- Presented a poster examining dual-task costs and speech intelligibility in audiovisual vs. audio-only conditions across L1 and LX English speakers. The study used both objective and subjective measures to assess listening effort and tested the generalizability of classic findings in speech perception.

### Improved Biomass Stoves and Improved Cooking Practices Contribute to Lowering PM2.5 Exposure in Addis Ababa, Ethiopia

- American Association for Aerosol Research Conference (Presented by PI, Deborah S. Gross, PhD), Portland, OR, October 2023
- Submitted and created poster presentation on 'Improved Biomass Stoves and Cooking Practices in Addis Ababa, Ethiopia, at AAAR 2023. The study focused on the effectiveness of fan-forced gasifier stoves for reducing indoor PM2.5 levels, comparing them with traditional cooking methods. Emphasized the importance of proper stove usage and training for maximizing health benefits.
- Presented subsection entitled Cooking Practices, Pellet Composition, and Improved Cookstove Performance at Carleton College.

### Exploring Barriers & Facilitators in Minority Recruitment for Cancer Clinical Trials: A Qualitative Study

- Summer Research Education Program Student Presentations, Rochester, MN, August 2023
- Presented research on a study that used qualitative methods to understand clinicians' perspectives on enhancing minority participation in clinical trials, identifying key barriers and facilitators, and proposing multifaceted strategies for improved recruitment and inclusivity.

## LEADERSHIP EXPERIENCE

### Carleton College, Northfield, MN

**November 2021 – June 2025**

*Committee Member ~ Advisory Committee on Student Life*

**January 2025 – June 2025**

- Serve as a student representative on a cross-functional committee focused on improving student experience and campus policy.
- Contributed to institutional dialogue on wellness, inclusion, and student engagement.
- Introduced a motion for Carleton to reassess its policies on combat sports, resulting in the formation of a focus group tasked with exploring safe and effective implementation strategies for combat athletics on campus.

### Co-Founder & Co-President ~ Minority Association of Pre-Medical Students (MAPS)

**September 2023 – June 2025**

- Co-founded Carleton's MAPS chapter to provide support, mentorship, and professional development for underrepresented pre-med students.
- As Vice-President (September 2023 – June 2024): Led planning for AMEC 2024, including travel, logistics, funding, and coordination with the Dean of Students Office to successfully take 12 students, the largest cohort among peer institutions.
- As Co-President (June 2024 – Present): Represented Carleton in the SNMA House of Delegates at AMEC 2025. Oversee strategic planning, quarterly reports, and financial forms; attend national MAPS leadership meetings; and ensure organizational continuity.

# ELHADJI AMADOU TOURÉ

[etoure33@gmail.com](mailto:etoure33@gmail.com) • <https://www.linkedin.com/in/elhadjiatoure> • [amadoutoure.com](http://amadoutoure.com) • <https://github.com/eatoure>

## *Co-Founder & Co-President ~ Doctors Without Borders Student Chapter*

*September 2024 – June 2025*

- Founded and built Carleton's official DWB student chapter, expanding global health education and fundraising for humanitarian aid.
- Coordinated with international DWB offices and campus leadership to secure recognition and funding. Organized speaker events, donation drives, and awareness campaigns.

## *Student Departmental Adviser ~ Computer Science Department*

*September 2024 – June 2025*

- Selected as a Student Departmental Adviser for the Computer Science department, providing academic guidance and support to peers.
- Disseminate essential information regarding courses, college requirements, and registration procedures to enhance student preparedness and success.
- Organize and coordinate departmental events to foster a solid academic and social community.
- Enhance the academic experience and community engagement within the Computer Science department through strategic initiatives and support.

## *Committee Member ~ Youth In Power (YIP) Grant Disbursement*

*June 2024 – September 2024*

- Selected to serve on YIP's competitive review board, awarding 10 scholarships of \$5,000 each to youth-led initiatives in the Twin Cities.
- Evaluated project proposals and impact statements to support emerging changemakers.

## *Treasurer & Secretary ~ Muslim Students Association*

*September 2023 – June 2024; September 2022 – December 2022*

- Handle communications between the MSA board, its members, and other religious organizations on campus.
- Collaborated with Carleton's Student Association's budget committee through applying for fund allocations.

## *Member ~ College Chaplain Search Committee*

*February 2023 – June 2023*

- Collaborated with faculty, staff, students, and the chief of staff of Carleton College to participate in the decision-making of hiring Carleton's new chaplain through meticulous review of applications and conducting interviews.

## *Member ~ Muslim Chaplain Search Committee*

*September 2022 – December 2022*

- Participated in the decision-making process for hiring Carleton's Associate Chaplain for Muslim and Interfaith Life.

## *Residential Assistant*

*August 2022 – August 2024*

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

## *Intern ~ Muslim Students Association*

*March 2022 – September 2022*

- Shadowed members of MSA's boards and attended board meetings.
- Provided insight regarding the needs of the first-year students in Carleton's MSA.

## *Secretary & Mentor ~ Men of Color Association*

*January 2022 – November 2022*

- Provided support and resources for male-identifying students of color by managing the organization's communications.
- Maintained involvement in mentorship program set up by Men of Color in Northfield's middle and high schools.

## *First Year Representative & Mentor ~ Men of Color Association*

*November 2021 – January 2022*

- Created and facilitated community-building events, including providing haircuts through contracted local barbers.
- Launched a mentorship program with local schools to support students of disadvantaged backgrounds.

## *Thrive Scholars, Scholar & Ambassador*

*April 2020 - June 2025*

- 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.

## **FELLOWSHIPS**

### **Roy Grow Fellowship, Bangkok, Thailand**

*November 2024 – December 2024*

#### *Independent Research Fellowship Recipient*

- Awarded the prestigious Roy F. Grow Fellowship for a significant experience in Asia.
- Engaged in an immersive exploration of Muay Thai Boxing to enhance understanding of holistic practices.
- Participated in rigorous Muay Thai and MMA training, bi-weekly circuit and beach training, jungle hikes, and calisthenics.
- Integrated physical activities with pre-medical studies by documenting and studying traditional Thai healing techniques practiced within the Muay Thai community.

# ELHADJI AMADOU TOURÉ

[etoure33@gmail.com](mailto:etoure33@gmail.com) • <https://www.linkedin.com/in/elhadjiatoure> • [amadoutoure.com](http://amadoutoure.com) • <https://github.com/eatoure>

## LABORATORY TECHNIQUES, SKILLS, LANGUAGES, AWARDS & HOBBIES

---

**Laboratory Techniques:** Polymerase Chain Reaction, Gel Electrophoresis, DNA Extraction, Compound Purification, Titrations, Spectrophotometry, Chi-square tests, Synthesis and Characterizations, and Use of pH Meter.

**Skills:** Flutter Programming (Advanced); Python Programming (Advanced, LinkedIn Skill Assessment Badge); Java (Advanced); C++ (Intermediate); GitHub (LinkedIn Skill Assessment Badge); R Studio (Advanced); Microsoft Word (LinkedIn Skill Assessment Badge); MongoDB (LinkedIn Skill Assessment Badge); Microsoft Excel; Figma (Intermediate); Swift; Kotlin; React; Node.js; Penetration Testing / Red Team Blue Team.

**Languages:** Native Speaker of **French** and **Wolof**. Full Professional Proficiency in **English**.

**Awards:** David John Field Prize (Carleton College); David Pollatsek '96 Prize in Computer Science (Carleton College); Carleton College Impact Challenge Pitch for Startups (2<sup>nd</sup> Place, \$5,000 Cash Prize); Roy F. Grow Fellowship for a Significant Student Experience in Asia; QuestBridge National College Match Scholar

**Hobbies:** Football (soccer), Boxing (Traditional and Muay Thai), Calisthenics, Basketball, Karate, Beat making, Gaming (FIFA, 2K, Fortnite, Rainbow Siege), Swimming, Chess, Weightlifting, Guitar.

## VOLUNTEER EXPERIENCE

---

**Project Friendship**, Northfield, MN

*January 2023 – June 2025*

*Mentor*

- Volunteer mentor working to bridge the gap between college students and children in the Northfield Area.
- Each week, engage with a 7-year-old, fostering a supportive relationship to help them navigate life's challenges.

**Carleton College**, Northfield, MN

*June 2022 – June 2025*

*Student Volunteer ~ Carleton College Admissions*

*September 2024 – June 2025*

- Support prospective student outreach through tours, information sessions, and student panels.
- Share personal experiences and insights to help guide applicants through the admissions process.

*Mentor ~ Carleton Liberal Arts Experience (CLAE)*

*June 2022 – June 2025*

- Served as a mentor, role model, residential advisor, and teaching assistant (TA) in summer academic program for 52 Black / African Americans who have just completed their sophomore year of high school. Ongoing mentoring of five of the program's alumni.

**HealthFinders Collaborative**, Northfield, MN

*December 2021 – June 2025*

*Program Director (Carleton College Liaison)*

- Uphold client confidentiality and customer satisfaction at a clinic that provides a comprehensive primary access point to health services for Rice County, Minnesota's marginalized, uninsured families.