RUBY YU

(817) 202-5237 | ryuby.yu@gmail.com | Atlanta, GA

EDUCATION

Georgia Institute of Technology — Atlanta, GA
Bachelor of Science in Computer Science — Aug 2022 – present (Expected May 2026)
  Concentrations: AI/ML & Human–Computer Interaction
  GPA: 3.60/4.0

Georgia Institute of Technology — Atlanta, GA
Masters of Science in Computer Science — Jan. 2026 – present (Expected May 2027)

EXPERIENCE

Research Assistant — Sept 2025 – present
Georgia Tech Technologies & International Development Lab — *Atlanta, GA*
- Contributing to AfriMedQA, the largest study on LLMs in African healthcare, benchmarking 20+ models on a 25K-question dataset across 32 clinical specialties in 15 African countries
- Conducting multilingual evaluations to assess model reliability across colonial and indigenous African languages in low-resource medical contexts
- Investigating failure modes and linguistic disparity patterns to support safer and more responsible deployment of medical AI in real-world settings

Data Scientist Intern — May 2025 – Aug 2025
EM-Powerhouse — *Waco, TX*
- Built an automated pipeline to replace manual review of 10K+ student application records per cycle for undergraduate admission, enabling data-driven recruitment and funding strategies
- Engineered an "academic readiness index" by integrating quantitative application features with LLM-based analysis of qualitative attributes
- Built feature engineering workflows and structured datasets to enable predictive modeling and evaluation of student enrollment outcomes

Undergraduate Researcher — Jan 2024 – May 2025
Georgia Tech Automated Algorithm Design Group — *Atlanta, GA*
- Integrated an LLM-guided evolutionary framework to automate optimization of PointNet++ and Point Transformer 3D point cloud classification models
- Refactored a hardcoded pipeline into a YAML-driven modular design, enabling automatic model detection and making it reusable for new architectures with only a one-line configuration change

Research Intern — July 2024 – Aug 2024
Shanghai Jiao Tong University X-LANCE Lab — *Shanghai, China*
- Researched early Alzheimer's detection; tested convolutional neural network (CNN) models to analyze patient speech patterns
- Processed and analyzed speech audio recordings to identify MFCC acoustic features indicative of cognitive decline
- Explored early-stage signal patterns as potential inputs for future clinical diagnostic models

RELEVANT COURSEWORK

Machine Learning, Artificial Intelligence, Computer Vision, Design & Analysis of Algorithms, Computer Graphics, Information Visualization, Discrete Mathematics, Probability & Statistics, Automata & Complexity

TECHNICAL SKILLS

Languages: Python, Java, C/C++, C#, SQL, R, JavaScript, HTML/CSS

Technologies: PyTorch, TensorFlow, NumPy, pandas, scikit-learn, Git, D3.js, Node.js, Tableau