AYDAN J. GERBER

+1 (914)-704-0350 | ajg359@cornell.edu | New Rochelle, NY, 10804 | linkedin.com/in/aydan-gerber | https://aydanjg.github.io

EDUCATION

Cornell University, Ann S. Bowers College of Computing & Information Science $\hfill$ **Ithaca, NY**
Candidate for Bachelor of Science in Information Science; Concentration in Data Science $\hfill$ *Expected, May 2028*
Cumulative GPA: 3.82/4.0

Iona Preparatory School $\hfill$ **New Rochelle, NY**
GPA: 98.75 | **SAT**: 1570 (Verbal: 790, Math: 780) $\hfill$ *Graduated, June 2024*

PROFESSIONAL EXPERIENCES

theCoderSchool $\hfill$ **Scarsdale, NY**
Computer Science Instructor $\hfill$ *May 2024 – August 2025*
• Instructed 60 K-12 students in coding through private lessons and group classes resulting in increased understanding of computer science
• Introduced engineering concepts through Lego robotics such as gears, motors, and piston designs resulting in a deeper understanding of physics
• Fostered coding skills using Java and Python through hands-on interactive coaching and programming concentrating on game development

Iona University $\hfill$ **New Rochelle, NY**
Teaching and Lab Assistant, Physics 101 $\hfill$ *June 2023 – August 2023*
• Facilitated 12 lab setups, devised a detailed kinematics experiment, and created a comprehensive 20 page instructional manual with diagrams
• Guided 15 students through assignments in kinematics, forces, and energy resulting in increased understanding of material and concepts
• Repaired old lab equipment and assisted students throughout lab setup and execution allowing for better conceptual understanding

Outamation $\hfill$ **Remote**
Extern $\hfill$ *May 2025 – July 2025*
• Built an AI-powered classification system for mortgage documents using open-source LLMs (Mistral-7B and Phi-2) with improved accuracy
• Optimized Retrieval-Augmented Generation pipelines using embeddings, hybrid retrieval, and custom chunking to improve speed and relevance
• Benchmarked model performance with DocLLM and LlamaIndex, delivering recommendations that increased data-extraction accuracy by 30%

RESEARCH EXPERIENCES AND ACTIVITIES

Cambridge University Press & Assessment $\hfill$ **Remote**
Independent Researcher & Author $\hfill$ *September 2022 – May 2023*
• Applied topic modeling with Latent Dirichlet Allocation to machine learning study on social media discourse with a focus on sustainability
• Found insights into how consumers and businesses interact with sustainability topics on social media and key trends in discussion on "X"
• Highlighted the dominant topics of discussion such as global corporate sustainability practices, environmental activism, and green technology
• Paper published in Environmental Data Science journal by Cambridge University Press, DOI: 10.1017/eds.2024.4

Cornell Fintech Club $\hfill$ **Ithaca, NY**
Financial Analyst $\hfill$ *September 2024 – present*
• Evaluate and present pitches on private tech/SaaS companies (EV < $1b) to invest in and determine appropriate exit strategy for investors
• Collaborated on FinSight AI, a fintech chatbot leveraging Retrieval-Augmented Generation (RAG) to deliver financial information to users
• Achieved a 90% accuracy in delivering up-to-date financial news and analysis and interviewed 20+ potential users to understand pain points

Student Activities Funding Commission $\hfill$ **Ithaca, NY**
Financial Consultant $\hfill$ *September 2024 – present*
• Offer financial planning, compliance, and logistics services by allocating $2M+ of funds across 900 on-campus organizations within Cornell
• Collaborate with Cornellian governance streamlining $400k distribution among administrative organizations, improving student and campus life

Manhattanville College $\hfill$ **Remote**
Research Assistant $\hfill$ *June 2023 – August, 2023*
• Conducted statistical analysis on Barbuda's vegetation comparing data from before the 2017 hurricane to 2019 post-hurricane Irma figures
• Identified a 15% decrease in overall native Barbuda vegetation and observed the introduction of 7 new species to the island due to hurricane
• Analyzed vegetation distribution and found that the hurricane led to a shift in more resilient and drought resistant plants for optimal survival

Cornell Data Science Project Team $\hfill$ **Ithaca, NY**
Team Member $\hfill$ *September 2024 – present*
• Developed LiveDance, a real-time computer vision application integrating pose estimation (MoveNet, BlazePose) with stable skeletal rigging
• Evaluated posture, timing, and alignment, delivering corrective feedback that improved user learning beyond existing scoring tools
• Partnered on a hedge-fund–sponsored Millennium Data Quality Framework project, creating validation metrics to detect systemic data issues

AWARDS, SKILLS, & INTERESTS

Awards: Regeneron Science & Engineering Fair (WESEF): 2nd overall & Ricoh Sustainable Development Award, Westchester-Rockland Junior Science & Humanities Symposium 3rd place: Speaker in Behavior III Category, First Honors, AP Capstone Diploma, AP Scholar with Distinction
Relevant Skills: Python, Java, Data Analysis, Natural Language Processing (NLP), Product Strategy, Communication, Leadership
Interests: Tennis, Weightlifting, Boxing, Sustainability, Technology, Philosophy, Poker