

James Burke

jcburke@colgate.edu — 516-319-8731 — [linkedin.com/jamesburke88](https://www.linkedin.com/jamesburke88) — github.com/james-burke8

Education & Honors

Colgate University

Hamilton, NY

Bachelor of Arts; Double Major: Computer Science, Economics

May 2025

- GPA: 3.57 / 4.00; Computer Science GPA: 3.68 / 4.00; Economics GPA: 3.67 / 4.00
- Dean's Award for Academic Excellence (Spring 2023), w/ Distinction (Spring 2022, Fall 2023, Spring 2024)
- Member of Omicron Delta Epsilon, the International Economics Honor Society
- Relevant Coursework: Data Structures and Algorithms, Software Engineering, Discrete Structures, Computing and Society, Computer Systems, Computer Networks, Intermediate Microeconomics, Intermediate Macroeconomics, Environmental Economics, Urban Economics, Applied Econometrics, Financial Economics, Calculus I, Statistics I

Harvard Business School Online

CORE Credential of Readiness

Summer 2023

- Grade: Pass with Honors
- 150-hour certificate program on business fundamentals from Harvard Business School
- Courses: Business Analytics, Economics for Managers, Financial Accounting

Technical Skills

- **Programming Languages:** Python, Java, C, HTML, CSS, JavaScript, Unix Shell, TeX
- **Tools and Programs:** PyTorch, Numpy, Pandas, Docker, Git, Oracle Cloud Infrastructure, MS Office Suite

Programming Project Experience

Assembly Simulator Project - C

Fall 2023

- Developed a simulator that visualizes the execution of ARM assembly code
- Utilized arrays, pointers, dynamic memory allocation, and structs to initialize the simulated ARM system, fetch and execute assembly instructions, and print the system state (stack and registers)

HTTP Proxy - Python

Spring 2024

- Created a multi-threaded HTTP proxy server in Python using Berkeley sockets for efficient network communication, enabling concurrent handling of client-server data exchange and dynamic content filtering
- Implemented caching mechanism to optimize web content delivery and reduce server response times

Work and Extracurricular Experience

Cognizant

Teaneck, NJ

Generative AI Extern

June 2024 - Present

- Designed, developed, and fine-tuned advanced AI models using Hugging Face and PyTorch, contributing to the creation of innovative generative AI applications
- Conducted extensive research on cutting-edge AI technologies, applying learned concepts to practical projects and enhancing technical proficiency
- Gained hands-on experience in AI development, learning best practices and industry standards for machine learning and deep learning

Center for Learning, Teaching, and Research

Hamilton, NY

Economics Tutor

Fall 2023 - Present

- Communicated complex concepts in an easily digestible manner to students struggling in economics to deliver a comprehensive learning experience
- Reviewed content provided by professors to devise robust and efficient tutoring plans and strategies

Colgate Investment Group

Hamilton, NY

Technology Manager

Fall 2023 - Present

- Led weekly meetings with the technology sector of the Colgate Investment Group, focusing on market research, prospect identification, and stock pitch preparation
- Coordinated and oversaw the creation of deliverables for earnings updates and stock pitches, ensuring all documents are meticulously proofread and incorporate insights from all contributing analysts

NCAA Division I Athletics

Varsity Men's Rowing

Fall 2021 - Present

Rower

- Provide leadership and direction for a Top 20 nationally ranked Division I rowing program, setting team goals, and fostering a culture of excellence and commitment
- Devote upwards of 25 hours per week to practice, competition, travel, conditioning, and individual training

Athletics Department

Fall 2022 - Present

SAAC Representative

- Act as liaison between men's varsity rowing team and the athletic department, understanding concerns of student athletes and collaborating with departments across campus to improve the student athlete experience