

Mellon College of Science

Sample Resumes

Biology.....	2
Chemistry.....	3
Math.....	4
Physics.....	5

Isabella Biology

ibiology@andrew.cmu.edu, (412) 268-2064, www.linkedin.com/in/ibiology

EDUCATION

Carnegie Mellon University, Pittsburgh, PA

May 2026

Bachelor of Science in Biological Sciences, GPA: 3.6/4.0

Minor: Biomedical Engineering

EXPERIENCE

Clinical Research Intern, Morristown Medical Center, Morristown, NJ

June 2025 – August 2025

- Investigated incidence of BRAF, NRAS, and C-Kit mutations in melanoma patients within the Atlantic Health System
- Conducted a retrospective chart review on 114 patients who underwent oncologic genetic testing
- Studied patient demographics leading to the possible development of certain genetic mutations
- Performed extensive literature review of medical articles pertaining to melanoma cases and genetic mutations
- Presented trends establishing the foundation of research and results of study in a comprehensive article

Office Assistant, Mellon College of Science Dean's Office, CMU

August 2024 – May 2025

- Facilitated operation of the office through administrative responsibilities and event coordination
- Managed 100 volunteers for MCS Pride Day; assigned positions and responsibilities to serve over 500 event attendees

LEADERSHIP

Board Member, NeuroSAC (Student Advisory Council), CMU

January 2023 – Present

- Plan and organize campus and community service events to increase camaraderie between Neuroscience majors while giving back to the Pittsburgh community

Secretary, Future Leaders of Science, CMU

September 2024 – Present

- Maintain accurate and thorough written records of organization's proceedings; collaborate with team of five officers to organize community service and fundraising events

Social Chair, Spanish and Latin Student Association (SALSA), CMU

March 2022 – May 2024

- Communicated virtually with members during COVID pandemic to foster community involvement and recruit new members while campus was closed

SKILLS

Research: Titrimetric analysis, cell transformation, enzyme digestions, DNA ligation, DNA synthesis, primer design, SDS gel, spectroscopy, bacterial vector cloning, electroencephalogram subject running, polymerase chain reaction, high-pressure liquid chromatography, infrared spectroscopy, nuclear magnetic resonance

Computer: Excel, PowerPoint, Word, MiniTab, SPSS

Languages: Spanish (fluent)

EXTRACURRICULAR

Intramural Track Team, Member

March 2023 – Present

Biological Sciences Student Advisory Committee, Member

September 2024 – May 2025

Alpha Phi Omega, Vice President of Community Outreach

September 2023 – May 2024

Chris Chemistry (they/them/theirs)

cchemistry@andrew.cmu.edu, (412) 268-2064, www.linkedin.com/in/cchemistry

EDUCATION

Carnegie Mellon University, Pittsburgh, PA
Bachelor of Science in Chemistry, Minor in Mathematical Sciences
Cumulative GPA: 3.88/4.0

May 2026

Relevant Coursework: Fundamentals of Programming & Computer Science, Modern Analytical Instrumentation, Professional Communication Skills in Chemistry, Molecular Design & Synthesis

RESEARCH EXPERIENCE

Chemistry Department, CMU

May 2024 – Present

Research Assistant; P.I. Dr. Alan Smyth

- Analyze the morphological and mechanical properties of polymers by atomic force microscopy
- Study electronic properties of nanoparticles by UV-Vis spectroscopy; analyze data using MATLAB and Mathematica
-

Drug Metabolism & Pharmacology Group, Cambridge MA

June 2025 – August 2025

Synthetic Chemistry Intern

- Carried out a new route to synthesize a drug of interest
- Performed analysis of reactions by HPLC and LC/MS, purification by column chromatography and preparatory HPLC, and characterization of new compounds by NMR spectroscopy
- Delivered a PowerPoint presentation to the DMP group of research directors at the end of the internship

Chemistry Department, CMU

May 2023 – May 2024

Researcher; P.I. Dr. Stefanie Sydlik

- Designed synthetic scaffolds that attach therapeutics to carbon nanotubes
- Observed delivery of the therapeutic to understand how it would release in the body; record results
- Analyzed novel products and confirmed the degree of functionalization
- Communicated new scientific techniques with the community via papers and publications
- Funded by NASA and a University grant to continue research in the summer

OTHER EXPERIENCE

Student Academic Success Center, CMU, *Peer Tutor*

October 2024 – Present

- Lead weekly tutoring sessions for individual students; conduct walk-in tutoring sessions for larger groups as needed
- Tutor students in multiple Modern Biology, Principles of Computing, Biochemistry, and Organic Chemistry

Eureka! First Year Seminar, Mellon College of Science, CMU, *Teaching Assistant*

August 2023 – May 2024

- Supported curriculum delivery of a first-year seminar course designed to facilitate student success in college
- Collaborated with faculty partner to plan and lead a weekly recitation section of 15 students to reinforce key concepts

TECHNICAL SKILLS

Laboratory: Atomic force microscopy, IR, NMR, EPR, UV-Vis, atomic absorption, fluorescence spectroscopies, column chromatography, HPLC, preparatory HPLC, gas chromatography, gas chromatography-mass spectrometry, liquid chromatography-mass spectrometry, distillation, gel electrophoresis, polymerase chain reaction

Computer: Python, Mathematica, LaTeX, MS Office, MATLAB

ACTIVITIES

Murder Mystery Play, Department of Chemistry, CMU, Cast Member

February 2025

First-Year Mentor Program, Mellon College of Science, CMU, Peer Mentor

August 2024 – December 2024

AWARDS & HONORS

ACS Analytical Chemistry Division Award, CMU

May 2025

Warner Prize for Sophomores, Mellon College of Science, CMU

April 2024

MALIKA DEMATH

412-555-1212, mdemath@andrew.cmu.edu

EDUCATION

Carnegie Mellon University, Pittsburgh, PA
Bachelor of Science, Computational Finance, GPA: 3.8/4.0

May 2026

Relevant Coursework: Mathematical Finance, Statistical Inference, Probability Modeling, Macroeconomics, Linear Algebra, Fundamentals of Programming, Data Structures and Algorithms, Differential Equations, Multivariable Calculus

SKILLS

Programming: Python, R, MATLAB, Java, C

RELEVANT EXPERIENCE

Quantitative Analyst, Global Research

June 2025 - August 2025

Fortress Investment Group LLC, New York, NY

- Built a model in Python that traces the movement of exchange rates through global and local macro drivers and delivered a report to FX traders based on findings of the model
- Developed a database in Python that processes and classifies 200+ excel source files of daily Brazil inflation monitor to support prediction of monthly official release
- Recreated computations of Brazil core inflation measure by analyzing BCB publications and statistics papers
- Organized Brazil inflation data to facilitate mid-month and end-month reporting by restructuring the file and constructing macros in VBA excel to fully automate computations and updates

Summer Analyst, Data Science Team

June 2024 - August 2024

BNY Mellon, Pittsburgh, PA

- Delivered proof of concept initiative to spearhead improvements in data handling best practices
- Devised real-time statistical models using raw data from Vertica to detect disruptions in database service
- Analyzed and logged the model's output to feed in to a database monitoring web app
- Developed Python script to help load market data into the FX trading technology group's database

Research Analyst, Department of Mathematical Sciences

June 2023 - May 2024

Carnegie Mellon University, Pittsburgh, PA

- Conducted research on options pricing within incomplete trinomial models with Dr. William Hrusa
- Provided research support by conducting mathematical computation and financial analysis of the results
- Determined maximized expected utility, indifference price, and optimal order size with various utility functions

LEADERSHIP AND PROJECT EXPERIENCE

Vice President, Black Latino Business Association

September 2024 - Present

- Coordinate stock pitch competition to enhance effective relations with other organizations on campus
- Schedule alumni speaker panels on topics related to business and finance; coordinate networking events

Personal Trading Account

2021 - Present

- Invest money in the financial markets by constructing a portfolio of stocks and EFTs on commodities, US equity indices and volatility index based on personal views of the markets

Center for Financial Innovation Case Competition

November 2023

- Placed 3rd out of 20 teams at a university-wide case competition
- Presented a business strategy to help PNC grow their mobile banking applications

Fundamentals of Programming Final Term Project

November 2022 - December 2022

- Designed and programmed an interactive version of Monopoly in a span of 3 weeks from scratch in Python
- Video demo: <https://www.youtube.com/watch?v=D6xPfNvr234>

Frank Physics

fphysics@andrew.cmu.edu, (412) 268-2064, www.linkedin.com/in/frankphysics

EDUCATION

Carnegie Mellon University, Pittsburgh, PA May 2026
Bachelor of Science in Physics, Minor in Mathematical Sciences
Major GPA: 3.6/4.0 Overall GPA: 3.2/4.0

Institute for the International Education of Students, La Plata, Argentina Fall 2024

Relevant Coursework: Thermal Physics, Introduction to Nuclear and Particle Physics, Linear Algebra, Nanoscience & Nanotechnology, Advanced Quantum Physics, Electronics, Physical Mechanics I & II, Independent Study (General Relativity)

EXPERIENCE

Undergraduate Researcher, Physics Department, CMU January 2025 - Present

- Operate and maintain mechanical, ion and cryo vacuum pumps; trained in ultra-high vacuum and vacuum deposition techniques
- Investigated properties of magnetic structures, using magnetic imaging (MFM), magnetometry (VSM), and synchrotron X-ray scattering techniques
- Collected magnetic images and magnetometry data to study magnetic ordering between nanoparticles and dynamics of magnetic fluctuations

Research Assistant, Physics Department, CMU May 2024 - August 2024

- Built and modified a Duplex Cryostat as part of a 4-person research team
- Studied the effect of the filaments size on the count rate per X-ray beam window size
- Used X ray diffraction at low temperature to study Bragg Diffraction with respect to temperature

Teaching Assistant, Mathematics Department, CMU January 2024 – May 2024

- Led two calculus sections each week for class of 95 students
- Graded weekly problem sets and provided feedback; developed answer keys for tests
- Explained and clarified difficult concepts to students during weekly virtual office hours

Research Intern, Geology Department, SUNY Purchase, Purchase, NY June 2023 - August 2023

- Mentored by Yuri Gorokhovich, PhD
- Analyzed data reflecting the changes in rock and water levels obtained from GPS satellites
- Investigated the physical properties from the data and displayed results in OpenDx

TECHNICAL SKILLS

Software: Matlab, Gnuplot, Mathematica, LaTeX, IBM 3-D OpenDx Visualization, Eclipse

Operating Systems: Linux, Windows 95/98/2000/XP, Mac OSX, Unix, TinyOS

Computer Languages: Java, C++, C, Perl, MySQL, Fortran

ACTIVITIES

President, Society of Physics Students May 2025 - Present

Mellon College of Science Physics Student Advisory Council August 2023 - Present

Intramural Soccer Club August 2022 - Present