

Claire Chou

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EDUCATION

Johns Hopkins University | Baltimore, MD

BS in Computer Science & Chemical and Biomolecular Engineering, Dean's List Expected Graduation: May 2027

- **GPA:** 4.0/4.0
- **Relevant Coursework:** Data Structures, Python, Java, Multivariable Calculus, Linear Algebra and Differential Equations, Physics, Chemical and Biological Process Analysis, Organic Chemistry

WORK EXPERIENCE

Johns Hopkins University, Bevan Lab – Research Intern

Baltimore, MD

Nov 2024 – Present

- Conducted research on colloidal and macromolecular systems in interfacial and confined geometries, focusing on their interactions, dynamics, and structures.
- Measured colloidal interactions with high sensitivity using TIRM and conducted analysis through MATLAB.

Johns Hopkins Gateway Python – Course Assistant

Baltimore, MD

Sep 2024 – Present

- Enhanced 50+ students' programming skills by assisting with practical coding exercises and debugging projects.
- Conducted one-on-one office hours, clarifying Python programming concepts, including data structures, algorithms, and object-oriented programming.
- Assisted in the administration of quizzes, graded assignments, and provided constructive feedback.

Columbia University Irving Medical Center, Kiryluk Lab – Research Intern

New York, NY

May 2023 – Aug 2023

- Investigated associations between urinary tract infections and specific genes on chromosomes 6 and 8 by conducting 45+ wet lab tests, identifying a positive relationship between genetic predisposition and UTI development.
- Analyzed 10+ literature articles and searched DNA databases to identify key genes relevant to the research.
- Conducted statistical analyses, including Chi-Squared tests and T-tests, using R, Jupyter Notebook, and Excel.

Pace University, Dyson Lab – Research Intern

Pleasantville, NY

Jun 2020 - Apr 2023

- Studied the impact of hunting on bison populations by analyzing over 2,000 vocal formants, identifying significant long-term negative effects.
- Developed automation scripts for Praat software, increasing analysis efficiency by 50%.
- Authored a paper describing research and results for submission to Regeneron STS and NY State Junior Science Symposium.

Balducci's Stores – Cashier

Scarsdale, NY

Jul 2022 – Dec 2022

- Processed transactions efficiently and provided excellent customer service, assisting with inquiries and resolving issues in a friendly manner.

EXTRACURRICULARS AND AWARDS

- American Red Cross | Youth Advisory Board Representative — Attended national conferences, organized blood drives and fundraisers; volunteered at local soup kitchens.
- Federated Conservationists of Westchester | Board Member — Hosted environmental events with over 100 attendees, tabled at local fairs, created graphics for social media and webpage.
- Girls Who Code SIP — Developed a personal website and engaged in discussions on programming concepts.
- Reading Buddies | President — Mentored 40+ students from underserved communities, focusing on literacy and math skills.
- Speech and Debate | Officer — Competed in the national circuit and mentored underclassmen.

Awards: National Merit Finalist, 2nd Place at NYS Junior Science and Humanities Symposium, PF Debate Finalist

SKILLS & INTERESTS

- **Languages:** C/C++, Python, Java, HTML, MATLAB
- **Laboratory Techniques:** Western Blots, ELISA Assays, PCRs, RNAScope, Pipetting, Titrations
- **Other Skills:** Microsoft Excel, Literature Analysis, Mentoring, Data Analysis
- **Interests:** Mini Crosswords, pottery, knitting, painting, volleyball, cooking