Jessica Ye

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EDUCATION

Barnard College of Columbia University | New York, NY | *Bridgewater Scholar*　　　　　Expected May 2027
B.A. Computer Science and Sociology | 3.70/4.00 GPA
Relevant Coursework: Data Structures (Java), Advanced Programming (C, Networking, Operating Systems), Databases (SQL), Natural Language Processing, Artificial Intelligence, UI Design, Fundamentals of Computer Systems (Assembly)
Activities: Computing Fellow, Barnard SGA Representative for Information & Technology, POLIS (VP of Professional Development), Columbia Votes (Treasurer), Impact Investing Network (Director of Club Engagement)
Teaching Assistant: Intro to Comp. Neuroscience (Matlab), Environmental Science Senior Workshop (Python, Matlab)

TECHNICAL EXPERIENCE

Datadog | New York, NY | *Incoming Software Engineering Intern*　　　　　　　　January – April 2026
Amazon | Sunnyvale, CA | *Software Development Engineer Intern*　　　　　　　　　May – August 2025
- Built core features for the Lab126 Device Quality Data Analysis platform using TypeScript, React, and Python, including data-node comparison tools and interactive visualizations to analyze test data across all stages of the device build process
- Refactored and optimized front-end architecture across multiple React views to support multi-component comparisons reducing data analysis time and improving overall usability for 50+ engineers and managers
- Deployed a new Z-margin aggregation algorithm with updated back-end models, enhancing statistical reliability for root cause investigations, generation-over-generation device performance tracking, and VP-level quality evaluations

International Research Institute for Climate & Society | New York, NY | *Research Intern*　　September 2023 – May 2024
- Developed a statistical forecast model using area yield data to enhance weather insurance schemes for farmers in Malawi, improving upon currently inequitable and variable insurance calculation mechanisms, saving $500,000+
- Deployed interactive web applications, using R Shiny and Python, for outreach programs with 5+ local non-profits and governments; worked with a team of 10 researchers (masters & PhD students)

Laansu Incorporated | Sterling, VA | *Software Engineering Intern*　　　　　　　　　June – August 2023
- Developed a framework to process car accident reports from the National Highway Traffic Safety Administration, using C# and .NET, contributing to increased efficiency and accuracy of accident documentation
- Created an API utilizing computer vision techniques to extract and verify requested information from hundreds of documents, streamlining the data collection process and improving processes by 30%

ADDITIONAL WORK EXPERIENCE & LEADERSHIP

Climate Cardinals | Mclean, VA (Remote) | *(Volunteer) Director of Finance*　　　　　June 2023 – Present
- Managed a $75,000+ annual budget; coordinated $200,000+ in grant-giving; led team of 10 deputy directors
- Facilitated translation and fiscal partnerships with United Nations Environment Programme, the UN Children's Fund, Condé Nast; reached 10,000+ volunteers in 80+ countries; consulted for F500 companies on communication strategy

July | New York, NY | *Sales & Product Intern*　　　　　　　　　　　　September 2024 – May 2025
- Facilitated demo calls; managed sales pipeline end-to-end, ideated marketing & sales campaigns for 250+ new leads
- Re-designed the user interface and experience (UI/UX) of key component (automated pitch decks), incorporating customer feedback & production specifications; worked with engineering & design team to iterate on customer testing

PROJECTS

NoteBuddy – React.JS, Flask, Python, HTML/CSS/JavaScript
- Online note-taking application providing personalized note-taking and study feedback based on user input
- Reached 500+ users and received $3,500 to develop and distribute technology
- Technologies: Flask back-end; React front-end dashboard; OpenAI API for chatbot responses

Curator – Next.JS, JavaScript, Flask, SQL (PostgreSQL)
- Produced a social networking application for sharing curated collections of multimedia content
- Implemented Flask/Next.JS stack with PostgreSQL on a Google Cloud Platform VM, iterated designs on Figma

TECHNICAL SKILLS & PROGRAMMING LANGUAGES

Languages: Python, Java, C, C#, C++, TypeScript, SQL, HTML, CSS, JavaScript, R, R-Shiny
Libraries/Frameworks: React, Flask, Angular, Vue, Node.JS, Express.JS, AJAX, REST APIs, NumPy, Matplotlib, Pandas
Other: Git, MongoDB, AWS, GCP, Docker, Vercel, Arduino, Android Studio, MATLAB, .NET, LaTeX