

Elifia Muthia

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EDUCATION

Barnard College, Columbia University | New York, NY | *BA in Computer Science* Expected May 2024
Dean's List (Fall 2020, Spring 2021, Fall 2021, Spring 2022) GPA: 3.96
Relevant Courseworks: Data Structures & Algorithms, Advanced Programming, Artificial Intelligence, CS Theory, Computational Linear Algebra, Calculus III, Introduction to Robotics Engineering, Discrete Mathematics

TECHNICAL SKILLS & LANGUAGES

Technical: Java | Python (Numpy, Pandas) | C | R | MATLAB | Node.js | Unix/Linux | MySQL/PostgreSQL | MIPS | Git/GitHub | HTML/CSS | JavaScript | JSON
Languages: Indonesian (Native) | Javanese (Intermediate) | Chinese (Elementary)

PROFESSIONAL EXPERIENCE

Barnard Programming Languages Lab, Barnard College | *Research Assistant* | New York, NY Jan. 2022 – Present

- Developed a software with Columbia's Neurological Institute to measure tremor severity.
- Programmed a Python script to graph 1000+ rows of data and analyze trends in FDA recalls of medical softwares.
- Refactored MATLAB legacy code to behave as a command line tool and run in the back end.
- Designed a web interface that collects information, such as pressure, on a spiral that is drawn by a patient.
- Built a web server using Node.js to connect the MATLAB code with the web interface to calculate and display the degree of severity of the patient's tremor.
- Attended stand-up progress meetings twice a week to maintain deadlines and discuss ways to resolve issues.
- Presented the product to our client, Dr. Seth Pullman, who will use this software to help his patients.

Docotel | *Software Developer Intern* | Jakarta, ID June 2018 – Aug. 2018

- Developed an app feature using Java that screens the top news in Indonesia that contain predetermined keywords.
- Automated the retrieval of recent news every 3 hours from REST APIs and flagged all news of interest.
- Created and updated tables in a MySQL database to locally store all flagged news.
- Designed a local Java app interface for users to add a new keyword to screen for and see all flagged news.
- Wrote progress reports to ensure transparency and accurate project documentation.
- Presented the end-product to the team adopting the feature.

LEADERSHIP & COMMUNITY INVOLVEMENT

Columbia Indonesian Society | *Community and Student Life Team* | New York, NY Sept. 2021 – Present

- Organized large-scale events alongside a team of 4 to strengthen the Indonesian community at Columbia.
- Negotiated with the executive board to secure \$200 in funding for the team.
- Hosted and mediated monthly programs that invite intellectual discussions among the community.

Private Tutor | *Mathematics and Computer Science* | Jakarta, ID | New York, NY (Remote) Dec 2019 – Present

- Tutored 8 middle school and high school students each for 1 hour a week on Mathematics and Computer Science.
- Enabled 3 students attain perfect scores in AP Computer Science A, AP Calculus AB, and IB Computer Science.
- Adopted different teaching strategies (e.g. diagrams for visual learners) to suit students' learning styles and goals.

E-commerce Club, Jakarta Intercultural School | *Co-President & Co-Founder* | Jakarta, ID Jan. 2019 – May 2020

- Co-founded the club to provide an E-commerce site for service clubs who rely on merchandising to attain funds.
- Interviewed service club leaders and consulted them to align the product with their expectations.
- Led the technical team in the construction of the E-commerce website and oversaw the team's progress.