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DHRUBA JYOTI PAUL

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EDUCATION

Madison, WI	University of Wisconsin - Madison	Sep 2020 – Aug 2023

- **Bachelor of Science** in Computer Science and Data Science with a CGPA of 3.94/4.00 (Dean's List, Distinction in Major)
- **Coursework**: Artificial Intelligence; Matrix Methods for ML; Algorithms; Machine Organization; Programming III; Discrete Mathematics; Differential Equations; Linear Algebra; Multivariable Calculus; Data Science II; Statistics and Data Modeling II; Operating Systems; Virtual Reality; Theory and Design of Programming Languages
- Invited into the Alpha Chapter of WI, **Phi Beta Kappa** Honor Society by the Dean of College of Letters and Science

Dhaka, Bangladesh	American International School Dhaka (AISD)	Sep 2016 - Jun 2020

- International Baccalaureate (IB) Program, Graduated with Honors, National Honor Society
- High School Executive Counsil Vice President, Founder of Robotics Club, Math Club Lead

Technical Skills and Frameworks

- **Languages**: Java, Python, R, C/C++, HTML, CSS, JavaScript, SQL, x86 assembly, PHP
- **Frameworks and Tools:** Numpy, Pandas, Selenium, flask, Git, MySQL, SQLite, Scikit-Learn, PyTorch, SciPy

Work Experience

Software Engineer	MYLO, Inc.	Oct 2023 - Present

- Developed mobile and web apps. Collaborated with designers to iterate on design and implementation.
- Identified and resolved performance and scalability issues by architecting modular systems and abstractions.
- Contributed to the company's overall success, including directly participating in the resolution of issues or concerns that arose in other departments, as necessary or prioritized by MYLO's management or executives.

Virtual Private Tutor	A Family in Pennsylvania	Oct 2020 - Dec 2021

- Provided virtual tutoring for two high school students in Mathematics and Computer Science fundamentals.
- Devised personalized study plans and assisted with homework during a year of COVID quarantine.
- Accelerated student progress by an entire grade level through active engagement on Khan Academy.
- Developed a Python-based command-line app to scrape student work from IXL and generate progress reports.

Community Service Leader	JAAGO Foundation	Sep 2016 - Jun 2020

- Successfully spearheaded fundraising initiatives to facilitate the education of underprivileged children.
- Organized and hosted a series of events for the poverty-stricken orphans affiliated with the JAAGO Foundation.
- Conducted visits to local JAAGO campuses to lead educational seminars and coordinate extracurricular activities.

PROJECTS

- **Face Emotion Classifier** (2023). Classifies faces by emotion with a 3-layer neural network. Trained using stochastic gradient descent. Accuracy estimated through 8-fold cross-validation. *Python, Keras, Tensorflow*
- **The New York Times Wordle Solver** (2022). Solves The New York Times Wordle on any given day in approximately 3 guesses. Displays each step dynamically as it interacts with the website. Algorithm: Uses maximum letter frequency for each position of a word to assign scores to all possible words. *Python, Numpy, Pandas, Selenium*
- **"Guess The Author" Mini Game** (2022): GUI application featuring interactive tree animations and audio effects to enhance user engagement. Given a quote, it challenges users to correctly guess the author of environmental literature, rewarding correct guesses with dynamic tree growth animations. *Java, Processing Library*
- **Nuke Proliferation** (2017). Built and deployed a dynamic website from scratch to create awareness on Nuclear Proliferation. Website traffic data collected through Google Analytics. *HTML, CSS, PHP, SQL*

Additional Experience and Awards

- **1st Place, CheeseHacks Hackathon** (2022). Built Facial Detection Attendance Tracker using cosine similarity (ResNet)
- **Florence Waste Pulver Scholarship:** Merit Scholarship awarded during Fall 2022 for academic excellence.
- **UW-Madison Undergraduate Scholarship for Summer Study:** Merit Scholarship. Awarded 2 consecutive years.
- **Caribou Contest Winner at AISD** (2018): Ranked 1st in the mathematics competition at AISD.