Advika Jhingran

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EDUCATION

Bachelor of Science in Computer Science
University of Michigan, Ann Arbor, MI
Expected 2024 GPA: 3.96/4.0

High School Diploma
Thomas Jefferson High School for Science and Technology, Alexandra, VA 2021,
Graduated 2021 | GPA: 4.45/4.0

Award-winning and innovative, standing junior, computer science major from the University of Michigan, with strong proficiencies in Java, Python, C++, HTML/CSS, Robotics (Building and Programming in Android Studio), Artificial Intelligence, and Machine Learning with an essential background in Natural Language Processing. Equipped with relevant work experience and versatile skills for beginning a productive and memorable internship experience.

CORE COMPETENCIES

System Programming | Data Structures and Algorithms | Discrete Structures | Statistical Analysis | Statistics and Probability I Statistics Programming Methods | Object-Oriented Languages | Statistical Analysis | Data Structure and Algorithms | Data Analysis | Software Testing | Critical Thinking | Detail Oriented | Flexibility & Adaptability

COURSEWORK

Multivariable Calculus | Linear Algebra | Discrete Math | Mechanics | Electromagnetism | Data Structures | Artificial Intelligence |Machine Learning | Algorithms | Statistics | Economics

AWARDS & RECOGNITION

William J. Brainstorm Freshman prize for ranking in top 5% in Engineering

Dean's Honor List for Winter 2022 & Fall 2021 in College of Engineering

Virginia affiliate winner of NCWIT Award for Aspirations in Computing (2019, 2020 & 2021)

RELEVANT WORK EXPERIENCE & INTERNSHIPS

Software Developer Intern | *General Dynamics Information Technology,* Herndon, VA
June 2022 – August 2022

- ✔ Worked with Android's Google predictive text library to identify passwords and messages sent to determine security risk for Intel & Homeland Security as part of Research & Development
- ✔ Applied various machine learning & deep learning techniques (Naive Bayes, Support Vector machines, Logistic Regression, BERT model, LSTM models, etc) for sentiment analysis
- ✔ Built language models using SpaCy & NLTK's WordNet to identify passwords/passphrases, perform information extraction, and conduct a better search tool
- ✔ Presented findings in showcase to 40 live attendees

Director of Workshops | *Girls Computing League,* Herndon, VA **September 2016 – August 2021**

- ✔ Organized Capital One sponsored codefest for 200 registered college students and helped facilitate the in-person and virtual AI Summit.
- ✔ Created a STEM workshop at the DC Housing Authority to educate underprivileged youth.
- ✔ Pioneered the GCL Scholars Program to recruit diverse college students to nearly 1,000 schools and teach them impactful tech topics.

App Developer | *Cyret Technologies,* Manassas, VA **April 2020 – June 2020**

- ✔ Co-developed an app, MyTrackr, on the Bubble platform that uses contact tracing to help track COVID-19 cases.

Intern | *Revat LLC,* Herndon, VA **July2019 – October 2020**

- ✔ Worked on creating an algorithmic trading program that predicted whether to short or sell stock.

PROJECTS

Training Microsoft's BERT Model on SQuAD **May 2021**

- ✔ Trained BERT (Bidirectional Encoder Representations from Transformers) on SQuAD (Stanford Question Answering Dataset)

Galaxy Identifier **January 2021 – April 2021**

- ✔ Built CNN (Convolutional Neural Network) to identify 10 types of galaxies for 80% accuracy

AI Game-Based Projects **September 2019 – January 2020**

- ✔ Created Sudoku, Sliding Puzzles, Tic-Tac-Toe, and Othello solvers through backtracking, BFS, DFS, minimax, and alpha-beta pruning.

EXTRACURRICULAR ACTIVITIES

Software Team Member | *Michigan Neuroprosthetics,* Ann Arbor, MI **September 2021 – present**

- ✔ Used Machine Learning techniques to classify hand motor movements from bicep EMG signals
- ✔ Achieved >95% accuracy on researched data; now applying classifier to custom EMG sensor

Embedded Software Team Member | *Michigan Mars Rover Team,* Ann Arbor, MI
January 2022 - present

- ✔ Coded tests for one of the robotic arms; used git for version control
- ✔ Won University Rover Challenge Championship 2022

Captain & Co-Founder | FIRST Tech Challenge (Team 10357 Volt-e-Mort) **2015 – 2020**

- ✔ Collaborated with seven fellow members on robotics projects for the FTC competition and collectively won several programming and overall awards, advancing to state qualifiers for five years.