# Arav Luthra

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### **OBJECTIVE**

Enthusiastic first-year Computer Science major with a strong passion for software development, data analysis, and statistics. Eager to apply foundational skills, collaborate on diverse projects, and contribute to innovative solutions in the dynamic field of computer science. I am seeking an entry-level internship to gain experience and continuously learn while helping companies meet its goals. I am simultaneously following a rigorous data science roadmap to expand my skill set and leverage my computer science skills.

#### **EDUCATION**

### **B.S.** in Computer Science and Mathematics

University of Maryland, College Park, MD

- Honors College: Advanced Cybersecurity Experience for Students (ACES)
- President's Scholarship Recipient: \$5,000 per year
- Courses: Applied Foundations in Cybersecurity, Data Structures/Algorithms, Linear Algebra, Applied Probability/Statistics, Discrete Mathematics, Introduction to Computer Systems

# Academy for Mathematics, Science, and Engineering

Specialized High School STEM Program in Morris County *High School Diploma* 

GPA: 101.854 (4.0) *Received: June 2023* 

### PROFESSIONAL EXPERIENCE

#### **TK Design Associates**

Morristown, NJ

Rockaway, NJ

Wireless Communications Development Intern

July 2022 - May 2023

Expected: May 2027

GPA: 4.0

- Drafted Lease Exhibits, Cell Site Designs (AutoCAD), Construction Drawings, Search Rings, and Zoning Drawings
- Conducted mock land assessments and generated mock reports
- Developed a Capstone Project. We assumed as if we were assigned an actual location to develop a cell site. In a group of four, we developed a Lease Exhibit, a Building Permit Application including subcodes, and a list of 10 items that need to be inspected after completion for the cell site development at this particular location.

#### PROJECTS & EXTRACURRICULARS

Personal Website (GitHub Link), Developer

May 2024

- Developed a personal portfolio website using React.js to showcase my projects and skills.
- Leveraged technologies including HTML5, CSS3, JavaScript, and React Router for seamless navigation.
- Implemented a responsive design to ensure compatibility across various devices and screen sizes.
- Integrated GitHub for version control and deployment, ensuring efficient project management.
- Gained hands-on experience with state management and component-based architecture in React.js.

### wAIste Waste Management Application (GitHub Link), Developer and Contributor

UMD BitCamp, April 2024

- Collaborated on developing the wAIste application utilizing Flutter for the frontend and Python for backend infrastructure.
- Utilized AI and ML algorithms for waste categorization and recommendations, enhancing waste management processes.
- Integrated Flask server and backend infrastructure, configuring API endpoints and AI model integration for recommendations.
- Assisted in optimizing application features for enhanced user experience and efficient AI model utilization.

### Independent Stock Market Prediction Passion Project (GitHub Link), Personal Project

July. 2022 - Aug. 2022

- Personal Research and implemented an LSTM (Long Short-Term Memory) network on Google Colab using Python
- Tested the LSTM Model on all Global Industry Classification Standard (GICS) economic sectors to identify trends in marginalized sectors

# Inspirit AI Scholars Program (Presentation), Participant

July 2022 - Aug. 2022, July 2021 - Aug. 2021

- A program that exposes students to fundamental AI Concepts and guides them to build a socially impactful project
- Trained a neural network and a transfer learning model to recognize different types of distracted drivers in a group

# **Inspirit AI Ambassadors Program,** AI Ambassador

Sept. 2021 – April 2022

- Program designed to build leadership skills in AI and network with AI mentors from Microsoft, Google, Amazon, Stanford, etc.
- Attended weekly meetings with ambassadors and mentors where a range of speakers discussed recent AI breakthroughs.
- Networked with fellow high school students from around 70 countries to collaborate on AI projects and competitions.

# **ADDITIONAL INFORMATION**

**Skills & Programming Languages:** Python (**NumPy, Pandas, Matplotlib**), Flutter, Microsoft Office, Java, R, C/C++, Unix/Linux, Bash, Javascript, SwiftUI, JUnit Testing, OOP, Markdown, AutoCAD, Solidworks, MATLAB, Multitasking, Communication, Computer Literacy, SQL, x86-64 Assembly, Container/VM Networking, Git, React JS, Flask, Node.js **Languages:** Fluent in Hindi (NJ Seal of Biliteracy) and English

**Involvements:** CP Student Investment Group, ACES CyberConnect Program, Competitive Programming