

SUHAAN BARU

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EDUCATION

- **University of Maryland, College Park** College Park, MD
Bachelor of Science in Computer Science Present

PROJECTS

- **BEAM Analysis Website** | *React, Axios, Express, MySQL*
 - Developed during Shertech Internship to analyze building energy and equipment usage.
 - Created multi-page forms for building details, utilization metrics, and equipment inputs.
 - Implemented persistent state management so data stayed saved when navigating pages.
 - Designed a top-bar navigation timeline for key project stages, dynamically highlighting the current step.
 - Connected to backend APIs for storing and retrieving data from a MySQL database hosted via Express.
- **Facial Recognition App** | *React, Python, OpenCV*
 - Built a facial recognition pipeline using OpenCV to detect and identify faces from a trained dataset.
 - Implemented ingestion of known_faces images and metadata handling for recognition accuracy.
 - Developed a React front-end for live camera feed and real-time recognition results.
 - Explored automation triggers such as notifications and smart device control after successful recognition.

TECHNICAL SKILLS

- **Languages:** Java, Python, C, JavaScript (ES6+), SQL (MySQL/Postgres), HTML/CSS
- **Frameworks / Libraries:** React, Node.js, Express, Flask, FastAPI, Material-UI
- **Tools:** Git, Bitbucket, VS Code, IntelliJ
- **Datastores / Other:** MySQL, PostgreSQL, Google Cloud Platform, NumPy, pandas, Matplotlib

EXPERIENCE

- **Harvard University** 2025
CS50: Introduction to Computer Science Online
 - Completed portions of Harvard's CS50 course covering C programming, algorithms, data structures, memory, and foundational computer science concepts.
- **Mathnasium** May 2024 – Jun 2025
Part-Time Instructor Flemington, NJ
 - Taught math to students ages 7 to 15, focusing on problem-solving and mental math.
 - Incorporated Mathnasium methods to help students solve problems efficiently.
- **Kumon** Aug 2020 – Oct 2022
Part-Time Instructor Flemington, NJ
 - Guided students in math and English concepts, preparing them for advanced coursework.
 - Developed a quiz portal for Computer Science class using JavaScript.
- **School Library** May 2023 – Jun 2025
Human Resources Intern Flemington, NJ
 - Fixed and set up school computers, installed software/operating systems, and replaced hardware.
 - Configured Z-Space computers with advanced eye-tracking for 3D object interaction.
- **Nokia Bell Labs** Jul 2023 – Aug 2023
Team Lead New Providence, NJ
 - Led the design and build of a robot using a swerve drive base for omnidirectional movement.
 - Competed in the RVSTS state-level robotics competition.
- **Tutor – 8th Grade Math** Jun 2025 – Aug 2025
Private Tutoring Remote
 - Tutored 8th grade math for 5 weeks, 5 days/week using IXL and custom practice plans.

ADDITIONAL

- **Robotics (Mechanical Captain):** Led design and driving; Impact Award Winner, Regional 1st Place, Top 15 District Finish.
- **Investing Club (President):** Hosted Wall Street trip for 30+ members; created Stock Market Game.
- **Tech4TEENS (Business Lead):** Taught coding/math to 3rd-4th graders; expanded program to 20+ members.
- **Debate (Vice President):** Organized fundraisers; multiple 1st place finishes in Parliamentary Debate.
- **Volunteering:** Unified Basketball (2024 State Champion), HOPS Volunteering, FLL Explore STEM mentor.