Ekansh Sahu

sahuekansh11@gmail.com | 240-501-5031 | https://russianraspberry14.github.io/ekanshsahu/
linkedin.com/in/ekansh-sahu-509098145/ | https://github.com/russianraspberry14

Education

University of Maryland, College Park   August 2023 - May 2027
Bachelor of Sciences, Computer Science
GPA: 3.914 - Dean's List
Relevant Coursework: CMSC131, CMSC132 (Object Oriented Programming I&II), FIRE (Research Experience: Bio-Inspired Robotics), CMSC216 (Computing Systems), CMSC351 (Algorithms)

Intermediate Web Development Bootcamp, Codepath   August 2024 - Dec 2025
- Completed a hands-on, project-based program focused on intermediate web development concepts, including responsive design, API integration, and full-stack fundamentals. Collaborated with peers to build and deploy web applications.

Machine Learning Specialization, Coursera (DeepLearning.AI)
- Courses: Supervised Machine Learning, Advanced Learning Algorithms, Unsupervised Learning & Reinforcement Learning

Skills

Programming: HTML, CSS, JavaScript, React (VITE, API Integration, Deployment with Supabase), Python (TensorFlow, Keras, OpenCV, Matplotlib, NumPy, Pandas, PyTorch), SciKit Learn, Java, C, Version Control (Git).
Design & Media: Adobe Photoshop, Illustrator, After Effects, Blender, Autodesk Maya, UI/UX Design.

Experience

SemiTronik Industries Pvt. Ltd.   April - July 2023
Intern
- Designed and implemented user interfaces for the company's website, contributing to a more user-friendly and visually appealing online presence.
- Enhanced proficiency in CSS and JavaScript by developing a fully functional website as part of a team, directly applying UI designs, and optimizing site performance.

Office of Undergraduate Research, University of Maryland   Aug 2024 - Dec 2024
Academic Peer Mentor (FIRE: Bioinspired Robotics)
- Mentoring classes of 40 FIRE students by facilitating discussions, aiding team projects, addressing questions, and helping in presenting research and papers.

Department of Resident Life, University of Maryland   Aug 2024 - Aug 2025
Community Assistant
- Administered key distribution, package processing, and service desk operations, streamlining daily tasks for 706 residents.
- First point of contact for visitors and residents; issued core key changes and troubleshooted issues in the building.

South Hill Area Council, University of Maryland College Park   August 2023 - Present
Vice President of Diversity, Equity and Inclusion
- Spearheaded diversity programs and initiatives, fostering an inclusive campus culture within the South Hill community.
- Coordinates and executes impactful events and awareness campaigns to advance the goals of the residence hall association's comprehensive diversity programs for 2000+ students.

Projects

Bioinspired Flight Optimization Project *FIRE Program, University of Maryland (2024)*
- Designed and tested flexible TPU-85A wingtips controlled via Futaba micro servos, Arduino Nano, and 6V NiMH battery, with control logic implemented using Arduino IDE to optimize active wingtip actuation for drag reduction and improved flight efficiency.
- Conducted iterative testing on a lightweight UMX Radian foam body, refining aerodynamic performance through servo torque analysis, CAD wingtip design, and material selection, achieving sustained flight times of up to 40 seconds with raised wingtips.

Handwritten Digit Recognizing Model (MNIST dataset)
- Developed a neural network model using the MNIST dataset to classify handwritten digits with high accuracy.
- Built a predictive system to classify new handwritten digits and validated results by comparing predictions with actual labels.