

SIDDHANT RAY

☎ +1 (919)-638 9648 ✉ siddhant.ray@duke.edu [in linkedin.com/in/siddhant-ray-ab2256308](https://www.linkedin.com/in/siddhant-ray-ab2256308) github.com/sray-duke

Education

Duke University

Bachelor of Science in Computer Science and Mathematics

Expected Graduation: May 2029

Durham, NC

Relevant Coursework

- Data Structures and Algorithms (CS201), Calculus II (MATH122), Implications of AI and LLMs Seminar (FOCUS)

Experience

Deloitte

July 2024 – August 2024

Tech Withholding Tax and Gen AI Intern

Mumbai, India

- Engineered a Python-based lookup tool using Pandas library to retrieve withholding tax provisions with corresponding Income Tax Laws, reducing manual research time by 40% and enhancing efficiency for Deloitte's Gen AI team.
- Authored a research paper to help AI analysts better interpret and deploy Python code, enabling the Gen AI team to integrate the tool into client-facing tax-tech workflows.

Prisma AI

June 2024 – July 2024

Machine Learning Intern (Backend Developer)

Mumbai, India

- Built a blur-detection tool (using Laplacian variance) for the company's airport security project, enabling Ahmedabad International Airport to differentiate between clear and blurred images and improve image quality control.
- Developed an anti-spoofing tool for banks, enhancing fraud prevention by identifying fake biometric attempts and strengthening identity verification.
- Applied advanced Computer Vision techniques (OpenCV, Haar Cascade Classifier) to annotate, train, and refine ML models, ensuring deployment readiness in high-security settings.

Projects

Flowlytix AI - Startup | Python, Streamlit, Pandas, Matplotlib

May 2025 – Present

- Launched Flowlytix AI, a natural-language data analysis platform that converts plain English prompts into automated, multi-step workflows for structured datasets.
- Delivered advanced insights through anomaly detection, safe percentage comparisons, and interactive dashboards, reducing manual data analysis time by 50%.
- Developed using Streamlit, Pandas, and Matplotlib with Google Sheets APIs, enabling real-time collaboration and professional-grade reporting.

VeriMail: AI-Powered Fake Email Detection Tool | Python, NLP

October 2024 – March 2025

- Built AI-powered email fraud detection system analyzing sender authenticity, embedded links, and NLP-based content signals to flag phishing attempts.
- Automated parsing of emails and attachments using Python's 'email' and 'mimetypes' libraries, reducing manual review time by 35%.
- Designed a risk scoring framework (0-100) to quantify email legitimacy, improving user identification of high-risk messages by 60%.

Duke Robotics Club | Python, ROS2, YOLO CNN

August 2025 – Present

- Collaborating with 15+ interdisciplinary teammates to program Oogway AUV for RoboSub 2026, focusing on autonomy, navigation, and underwater task execution.
- Developing C++/ROS2 motion control and path-planning modules, boosting vehicle stability and accuracy in competition environments.
- Training YOLOv7 vision models on octagonal imaging data, integrating camera and sonar inputs to enhance underwater object detection and localization.

Technical Skills

Languages: Python, Java, HTML/CSS

Developer Tools: VS Code, IntelliJ, PyCharm

Technologies/Frameworks: GitHub, replit, WordPress, NLP, TensorFlow, PyTorch, OpenCV, scikit-learn