

SAKSHAM RAJBHANDARI

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EDUCATION

Drexel University - Philadelphia, PA - Bachelor of Science in Computer Science 09/26/2023 - Expected June 2028

- Grade: Sophomore
- GPA: 3.81

RELEVANT COURSEWORKS

- Computer Programming I, II
- Advanced Programming Tools and Techniques
- Mathematical Foundations in Computer Science
- Computing and Informatics Design I, II, III
- Calculus I, II, II
- Introduction to Software Engineering

SELECTED EXPERIENCE

Drexel's Digital Development Camp - Philadelphia, PA - Counselor 07/08/2024 - 07/25/2024

- Mentored a diverse group of 80 students during the 3-week camp focused on full stack development projects.
- Conducted workshops on Python and Pygame, significantly enhancing the coding skills of the entire camp cohort.
- Provided intensive mentorship to 2 teams and contributed over 25 hours of collaborative coding to integrate AI.
- Guided the 2 teams to top finishes, with one implementing YOLOv8 for ASL Translator (1st place), and another using LLM for a hair care application (3rd place).

PlantDoc : Harvesting Hope with AI - Philadelphia, PA - CI 102/103 Member 01/07/2024 - 06/10/2024

- Led a team of four to train a CNN model, achieving 97.6% accuracy to detect plant diseases.
- Utilized TensorFlow library to create an input pipeline to feed the model over 56,000 images of 33 different diseases.
- Developed a dynamic, responsive website with HTML/CSS and JavaScript for enhanced user experience.
- Implemented GEMMA API to power an AI chatbot that provides disease clarification, symptoms and cure.
- Facilitated a seamless connection of the website, CNN model, and chatbot using FastAPI and JavaScript to receive disease diagnosis.

MeroSiksha - Kathmandu, Nepal - Intern 08/02/2022 - 10/07/2022

- Utilized PowerPoint and Canva to create over 100 meaningful and creative animations for science courses.
- Recorded the animations, synchronized audio and video, and uploaded to the MeroSiksha app.
- Enabled students on the MeroSiksha learning app to learn various subjects through these animations.

PROJECTS

VIP: Future of Power and Energy - Philadelphia, PA - Research Project 04/01/2024 - 06/21/2024

- Implemented Stereo Vision using OpenCV, enabling a robot to locate a specific dimension wireless charger cuboid box underwater.
- Applied the Semi-Global Block Matching (SGBM) algorithm for real-time disparity calculation, contour and object detection.
- Achieved precise real-time object detection in challenging underwater conditions by fine-tuning the algorithm to handle light refraction.

Bio Sortify : AI for greener tomorrow - Philadelphia, PA - Philly Codefest Contestant 04/20/2024 - 04/21/2024

- Fine-tuned VGG16 pre-trained model with 200,000 images, achieving 98.8% accuracy in waste categorization.
- Engineered a dynamic website with HTML/CSS and JavaScript and integrated the TensorFlow.js model for image processing and result retrieval.
- Enabled real-time classification system that processes each video frame and retrieves predictions instantly.
- Currently working to implement YOLOv8 nano model for more precise and accurate waste detection.

HONORS AND AWARDS

- Dean's List, Drexel University - Awarded for earning a GPA over 3.60 and carrying over 12 credits
- A.J Drexel Scholarship - Awarded based on merit
- Glocal Tech Camp coding bootcamp - Runner up
- Inter-School Basketball Tournament, Olympics day - Winner

SKILLS

- **Programming Languages:** Python, Java, C, C++, HTML/CSS, JavaScript
- **Tools:** TensorFlow, PyTorch, FastAPI, AWS Sagemaker, Git, Excel, Unix, Linux, OpenCV, Folium
- **Sports:** Basketball, Soccer