Aryan Roy

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EDUCATION

The Pennsylvania State University, University Park, PA
Computer Science (B.S.) *May 2024 (Expected)*
Cumulative GPA: 3.7
Minor: Mathematics, Engineering Leadership and Development

WORK EXPERIENCE

Mitchell International | San Diego, CA
Machine Learning Intern *Summer 2022*

- Developed CNN/ Deep Neural Net algorithmic models across Mitchell Auto Physical Damage products using Python, Tensor Flow, Java and .NET programming languages.
- Worked on solving problems dealing with high data dimensionality, programming large matrix computations, variable transformation & feature engineering and selection using PCA and other ML model techniques.
- Working alongside Smart Solutions ML Engineers on Kanban based agile framework to design, deploy and implement models in Dev/Production environment for production of AI services that help in estimating Auto Vehicle damage and claims used by insurers repairers, OEMs and technology providers.

Department Of Computer Science and Engineering | Penn State University, PA
Learning Assistant *Summer 2022-Present*

- Assisting the professor with the course plan and coordinate in order to facilitate in-class activities such as weekly tests or group discussions.
- Conducting Weekly Coding Challenge for extra credit, where students compete in order to submit the most efficient solutions to DSA questions such as FizzBuzz, Maximum SubAraay Sum, and other algorithmic questions.

PROJECTS

42MORO
Machine Learning Model

- Predicting powdery mildew from an environmental sensor in order to study the fertility of the soil using Computer Vision
- Working with the design team on the User Experience and the User Interface of the model.
- Providing a solution to help small scale farmers where they can enhance their yield using the features provided by the application

Airport Cooperative Research Program
Computer Vision Prototype

- Addressing poor cockpit visibility to enable safer taxiing and reduce delays during poor weather by giving aircrafts a safer approach for taxiing.
- Interacting with Stakeholders who currently work in the aerospace industry for a better understanding of the problem of Runway incursions and use of ASDE and Synthetic Vision being used for the inflight operations.
- Developing a prototype by incorporating Structured Light into Synthetic Vision to create 3D mapping of obstacles that are subject to runway incursion.

SKILLS

Technical skills: Java, JavaScript, Python, HTML/CSS, Kotlin, Object Oriented Programming, SQL Database

Creative skills: Adobe Photoshop, Adobe Premiere Pro, Adobe After Effects, Figma, Spline, Unity, Three.JS

Soft skills: Leadership, Teamwork, Organization, Adaptability, Problem Solving, Creativity, Active Listening

HONORS AND AWARDS

Leonhard Centre for the Enhancement of Engineering Education and Scholarship *Fall 2021*

Eberly College of Science Learning Assistant Excellence Scholarship *Spring 2022*

Airport Cooperative Research Program: Most Innovative Solution *Spring 2022*