Trainee Interest Opportunities

Title: Optics and medical imaging assisted by AI

Mentor: Dr. Muhammad Alli & Dr. Glebys Gonzalez Department: Machine Learning

Location: SRB-1st-21200

Contact Information:

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Project/Lab Description:

* Experimental design and data acquisition for medical optics.
* Assistance with comparative medicine research.
* Data analysis of images and signals.
* Implementation of standard machine learning algorithms.

Time Commitment: 10 hours a week

Student Requirements:

* Physics/engineering background preferred with personal interest in optics and medical imaging (CT/Ultrasound)
* Proficiency in at least one object-oriented programming language (e.g., Python, MATLAB, Java, C++), training will be provided.

Learning Outcomes:

1. Practical experience in an optics lab and exposure to clinical research applications.
2. Exposure to medical image visualization software.
3. Practical experience in digital signal preprocessing and analysis.
4. Exposure to image-to-image translation to build a strong portfolio of machine learning skills.
5. Development of research skills and presentation skills. 