Dulitha Jayakodige

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Ph.D. candidate in Theoretical Nuclear and Particle Physics with 6+ years of research experience. Data Science enthusiast who looks for an opportunity to exploit Physics, Mathematics, and Programing skills to create innovative solutions for real-world problems.

PROFESSIONAL EXPERIENCE

Research Assistant 05/2019-present

Thomas Jefferson National Accelerator Facility Newport News, VA.

- Proposed a Pion Nucleon Scattering model based on Chiral Perturbation Theory and 1/Nc Expansion for getting a better agreement with experimental data.
- Developed data cleaning, analyzing, and visualizing programs using Python and Mathematica for fitting large experimental data sets to various theories.

Research Assistant 01/2016 - 04/2019

Graduate Physics Research Center, Hampton University, Hampton, VA.

- Designed a Quantum Ghost Imaging experiment and prototyped it with a Monte Carlo simulation using Python and Matlab.
- Built a data acquisition system to detect photons from a Photomultiplier tube using Matlab.

Teaching Assistant

02/2015 - 05/2017

Hampton University, Hampton, VA and University of Colombo, Sri Lanka

- Taught and graded Introductory Physics Labs and tutorial classes for undergraduates.
- Improved two lab experiments by automating and reducing data reading uncertainties using Matlab.

EDUCATION

Ph.D. in Theoretical Nuclear and Particle Physics (GPA:4/4) expected December 2023 Hampton University, Hampton, VA.

Deep Learning Specialization

expected January 2023

Deeplearning.AI/Coursera.com

IBM Data Science Specialization

March 2022

IBM Skills Network/Coursera.com

(https://www.coursera.org/account/accomplishments/specialization/certificate/87SKD667PENA)

B.Sc.(Hons) in Physics, (GPA: 3.29/4)

January 2015

University of Colombo, Sri Lanka.

SKILLS AND INTERESTS

 $\textbf{Programing skills}: \ \text{Python}, \ \text{Mathematica}, \ \text{MATLAB}, \ \text{LaTeX}, \ \text{SQL}, \ \text{Java}, \ \text{Linux}, \ \text{and} \ \text{Windows}$

Languages: Fluent in English and Sinhala

Awards: 2nd place at the hackathon organized by Artificial Intelligence for the Electron Ion Collider

Interests: Chess, photography, and hiking

PORTFOLIO

https://dulithajayakodige.github.io//