

Samalka Anandagoda, Ph.D.

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SUMMARY

Data science and programming research professional with experience in extracting, cleaning and analyzing large data sets as well as developing computational models used in astrophysics research. Excellent track record of communicating relevant research work conducted using these techniques at multiple international conferences and reputed journal publications.

RESEARCH AND WORK EXPERIENCE

Aug 2024 - Present	Visiting Assistant Professor of Physics <ul style="list-style-type: none">○ Asdasdsasdadssa○ Adassdas○ Adsas	Washington College, Maryland
Aug 2023 – Aug 2024	Research Fellow <ul style="list-style-type: none">○ Afsafsa○ Afsasaf	Clemson University, SC
May 2022 - Aug 2023	Research Assistant <ul style="list-style-type: none">○ Developed and debugged a Monte Carlo particle transport simulation code. The code incorporates advanced computational algorithms and physics-based simulations to handle complex particle interactions and dynamics. The code was run on a High Performance Computing (HPC) cluster to leverage parallel processing and to increase simulation throughput.	Los Alamos National Laboratory, NM
Aug 2016 - Aug 2023	Astrophysics Researcher (Ph.D. Candidate) <ul style="list-style-type: none">○	Clemson University, SC

SOFTWARE RELEASES

SNUGGY: Simulation package that maps the location of the stars in the Milky Way galaxy based on a 2D probability distribution function. The neutrino and gamma-ray emission is also modeled to ensure the simulated sources follow a log-normal distribution along with a capacity to add more functionality.

SKILLS

Tools	Python (PyTorch, SciKit, pandas, matplotlib, numpy, scipy, seaborn), C++, SQL, Jupyter Notebooks, Google Colab,
Concepts	Statistics, Machine Learning, Clustering algorithms, Regression and Classification, Differential equations, Monte Carlo method, Git version control, High performance computing,

EDUCATION

Aug 2019 - Aug 2023	Ph.D. in Astronomy and Astrophysics	Clemson University, SC
Aug 2016 - Aug 2019	MS in Astronomy and Astrophysics	Clemson University, SC
Nov 2011 - Nov 2015	Bachelor of Science in Physics Major: Physics, Minor: Computer Science and Mathematics	University of Peradeniya, Sri Lanka