Bryson STEMOCK
Data Scientist

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≡ SKILLS

Languages	Python, R, SQL, HTML, C++
Tools	NumPy, Pandas, SciKit-Learn, Tensorflow, SciPy, Matplotlib, Seaborn, mlxtend, ggplot2, PySimpleGUI
ML Methods	Neural Networks, Linear/Logistic Regression, Random Forest, Decision Trees, K-means Clustering, Spectral Clustering, GMM, DBSCAN, Association Rules, Local Outlier Factor, Isolation Forest
Personal	Communication, Critical Thinking, Debugging, Independent Thinking, Internal Motivation, Teaching, Team Orientation, Time Management, Troubleshooting, Tutoring

💼 WORK EXPERIENCE

May 2019 – Present — Graduate Assistant, NEW MEXICO STATE UNIVERSITY
> Convolutional Neural Network design and implementation on quasar absorption line spectra
> Management and analysis of large data sets
> Author and Coauthor journal publications and grant proposals
> Clear, concise research presentation (conference talks and posters)

Machine Learning | Data Analysis | Galaxy Evolution | Teaching | Public Outreach

Jun 2021 – Jul 2021 — 2021 APO Science Symposium Webmaster, APACHE POINT OBSERVATORY
> Creation and management of interactive website, YouTube channel, and Zenodo archive for a virtual conference. This facilitated registration, poster submission and display, and an interactive schedule.
> Local Organizing Committee member; virtual conference planning and logistics
> Virtual presentation session technical support

Interactive Web Design | Virtual Conference Planning

Aug 2016 – May 2019 — Undergraduate Research Assistant, YOUNGSTOWN STATE UNIVERSITY
> Dwarf galaxy survey (led to a refereed publication)
> Statistics analysis of student outcomes in STEM statistics courses (led to a refereed publication)
> Management of several projects in parallel
> Data management and analysis

Extragalactic Astronomy | Optical Physics | Statistics

📖 FIRST-AUTHOR PUBLICATIONS

Jun 2024 — Deep Learning Voigt Profiles. I. Single-Cloud Doublets
B. Stemock, C. W. Churchill, & A. Lee et al., *Astronomical Journal*

Nov 2020 — On the equitable total $(k+1)$-coloring of k-regular graphs
B. Stemock, *Rose-Hulman Undergraduate Mathematics Journal*

★ NATIONAL HONORS AND AWARDS

2021 - 2024 — NSF Graduate Research Fellowship, National Science Foundation
Awarded to facilitate groundbreaking research applying machine learning to quasar absorption line spectroscopy. The NSF GRFP recognizes and supports outstanding graduate students in NSF-supported STEM disciplines.

🎓 EDUCATION

Expected 2025 — Ph.D., Astrophysics
New Mexico State University

2024 — Master of Data Analytics
New Mexico State University

2023 — M.S., Astrophysics
New Mexico State University

2019 — B.S., Physics & Astronomy, Mathematics, *summa cum laude*
Youngstown State University