Landon Buskirk

WORK EXPERIENCE

MSU Honors College Professorial Assistant
Facility for Rare Isotope Beams – Theoretical Nuclear Physics
Sept. 2022 – May 2023; Sept. 2023 – Present, East Lansing, MI
- Launched the Bayesian Mass Explorer web app using Python, HTML, and CSS, to provide open-source data retrieval, visualization, and uncertainty quantification for several nuclear data sources
- Submitted publication analyzing the capture of subshell closures between experimental data and theoretical models
- Publicized my research and web app through an oral presentation given at the APS Division of Nuclear Physics conference in Hawaii

Student Research Assistant
Facility for Rare Isotope Beams – Theoretical Nuclear Physics
May – Aug. 2023, East Lansing, MI
- Slashed uncertainty quantification expense by engineering a neural network architecture in Python that learned normalizing flows for posterior distributions, emulating slow Monte-Carlo sampling
- Produced visualizations and identified evidence of subshell closures through signal detection, validating theoretical methods

Data Entry Clerk/Warehouse Employee
Delphi Glass
June – Aug. 2021, June – Aug. 2022, Lansing, MI
- Constructed a marketing database using Excel, granting the company 42,000+ easily identifiable clients
- Stocked, pulled. manifested products while cooperating with a team of 12 to ensure timely delivery for customers

ADDITIONAL PROJECTS

MoneyTalk Financial Education
Aug. 2023 – Present
- Founding a business to provide an accessible web and mobile app to teach financial literacy in an engaging, simplified, and gamified way
- Driving development of the web app using Figma to collaboratively plan, Canva to design graphics, JavaScript (React) along with HTML and CSS to create the front-end, and AWS Amplify to implement the back-end

Analyzing the Fractal Dimension of Abelian Sandpiles
Sept. 2022 – Apr. 2023
- Programmed simulations of math structures (sandpiles) in Python revealing fractal dimension properties across different lattices
- Presented a collaborative poster on novel research at UURAF, an undergraduate research forum at Michigan State University

CONTACT

- Mason, MI
- buskirk9@msu.edu
- landonbuskirk.com
- LinkedIn
- GitHub

EDUCATION

Michigan State University
B.S. Data Science
Sept. 2022 – May 2025
East Lansing, MI
Honors; Minor in Physics;
GPA: 4.0*;* State Scholarship;
Alumni Distinguished
Scholarship Finalist

SKILLS

Python (*Pandas, Plotly, TensorFlow, Scikit-learn*)
R (Tidyverse, ggplot)
Git
SQL
Data Visualization
Machine and Deep Learning
Statistical Analysis
High-Performance Computing
Web Development (*HTML, JavaScript, CSS, React*)
AWS Amplify
Canva, Figma

Pie chart: Web Development 30%, Predictive Modeling 30%, Data Engineering and Analysis 40%