# ERIKA HARTMAN

## PROFESSIONAL SUMMARY

Process-driven analyst with AI/ML knowledge and project management experience. Industry experience in simulation tools and various AI/ML fields including reinforcement learning and large language models. Active security clearance, and a research background in computational cosmology. Excellent team player with strong interpersonal communication skills.

### WORK HISTORY

# Space Systems Analyst, 08/2021 to Current Stellar Science Ltd Co - Albuquerque, NM

- Performed data analyses on customer provided data with software developed in-house.
- Lead development role for software products for machine learning analyses, including one that reduces data needs for training ML surrogates by up to 90%.
- Lead successful proposal efforts for 3 Phase I and Phase II Small Business Innovative Research programs (SBIRs), and assisted on 2 other successful SBIR proposals and one larger contract proposal.
- Currently leading 4 Phase I and Phase II SBIR efforts primarily focusing on reinforcement learning, with teams of up to 4 people.

#### **Graduate Research Assistant,** 01/2015 to 11/2020 **University of Arizona** - Tucson, AZ

- Developed code for performing cosmology analyses on large data catalogs.
- Generated and analyzed mock data catalogs for developing code and testing statistical models.
- Performed Bayesian analyses via Markov Chain Monte Carlo for multidimensional likelihood minimization.

#### Undergraduate Research Assistant, 05/2013 to 07/2014 The Ohio State University - Columbus, OH

- Developed code for analyzing data in order to fit model to data.
- Used SQL to query database for relevant data.
- Used regression techniques to compare data to various models.

#### **Undergraduate Researcher**, 06/2012 to 08/2012 **The Ohio State University** - Columbus, OH

- Developed code in C/C++ to test hardware responses.
- Created visualizations of test results.

#### **CONTACT**

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### SKILLS

- Python, C++, SQL, Mathematica, Advanced Framework for Simulation Integration and Modeling (AFSIM)
- Technical Documentation
- HTML, CSS, Markdown, reStructuredText, LATEX
- Linux, macOS, Windows
- Git, Bash, Microsoft Office, LibreOffice, Keynote, Numbers, Pages
- Reinforcement Learning, Machine Learning
- Technical Analysis, Technical Writing
- AGILE development

### WEBSITE, PORTFOLIO, PROFILES

- https://wagoner47.github.io/
- https://github.com/wagoner47
- https://orcid.org /0000-0002-9461-944X
- www.linkedin.com/in/erikalynn-hartman-138178188

# **PUBLICATIONS**

I have 11 publications including conference proceedings, published code, theses, and papers. You can find the full list on my Google Scholar page: https://scholar.google.com /citations?user=9ffsq-UAAAAJ

# EDUCATION

#### Ph.D., Physics, 05/2020

#### University of Arizona - Tucson, AZ

- Dissertation: Enabling Galaxy Clutering and Dynamics as Tools of Precision Cosmology ( http://hdl.handle.net/10150/650777 )
- Advisor: Dr. Eduardo Rozo

#### Bachelor of Science, Physics; Astronomy And Astrophysics, 05/2014

- The Ohio State University Columbus, OH
- magna cum laude graduate
- with honors in the Arts and Sciences
- with Honors Research Distinction
- Thesis: Testing Stellar Models for M Dwarfs (http://hdl.handle.net /1811/60400)
- Advisors: Dr. Jennifer Johnson, Dr. Sarah Schmidt