

# Dale C. Jackson, Ph.D.

Manager  
Weaponization Science R&D  
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## Education:

Ph.D. Astrophysics, Department of Astronomy, University of Minnesota 2007  
*A Spitzer Space Telescope Survey of Nearby Dwarf Galaxies*

B.S. Astrophysics, Mathematics Minor, University of New Mexico 2001

## Professional Experience:

Manager, Weaponization Science R&D, Sandia National Laboratories 2019 – Present

- Managed 19 Staff Members and \$10M/year R&D Portfolio
- Guided Sandia's Proliferation Detection Technology Roadmap
- Advised Government Program Managers on National Remote Sensing Capabilities and Technology
- Member of Intergovernmental Working Group on Next Generation Proliferation Detection Systems

Principle Member of Technical Staff, Sandia National Laboratories 2014 – 2019  
United States Nuclear Detonation Detection System

- Project Lead: Satellite Ground System Development
- Project Lead: Satellite Anomaly Resolution and System Optimization Studies
- Principle Investigator for High Explosive Test Campaigns
- Coordinated Program Development and Internal R&D Efforts
- Primary Technical Interface to U.S. Air Force Technical Applications Center
- Intergovernmental Assignment to U.S. Air Force Technical Applications Center

U.S. Air Force Technical Applications Center, Patrick Air Force Base, FL 2012 – 2014  
Intergovernmental Personnel Assignment

- Transitioned R&D Program to Operations
- Trained U.S. Air Force Officers and Civilians on Data Processing and Analysis

Senior Member of Technical Staff, Sandia National Laboratories 2009 – 2012  
GPS Block IIA and IIR Data Analysis and Exploitation

- Team Lead for Major Flight Software Modification Effort
- Contributed to Anomaly Resolution and System Optimization Studies
- PI: "Novel Geolocation Techniques Using Timing-Based Sensors"

Limited-Term Technical Staff, Sandia National Laboratories 2007 – 2009  
GPS Block IIA and IIR Data Analysis and Exploitation

- Characterized Events of Interest and Assessed Satellite State-of-Health
- Developed Real-Time Background Source Database
- Wrote Data Processing and Data Visualization Software
- Worked with Ground System Engineers to Resolve Data Processing Issues

Research Assistant, University of Minnesota, Dept. of Astronomy 2003 – 2007  
A Spitzer Space Telescope Survey of Nearby Dwarf Galaxies

- Performed Resolved Infrared Imaging of Nearby Dwarf Galaxies
- Investigated the Dust Formation/Destruction Processes in Metal-Poor Galaxies
- Wrote Successful Spitzer Space Telescope Observing Proposals
- Developed Numerous Data Analysis and Visualization Tools
- Created a Data Analysis Pipeline for Automated Processing, Calibration, and Source Extraction of Space Telescope Imaging Data
- Analyzed UV, Optical, and Infrared Imaging, and 21 cm Interferometry of Nearby Galaxies

Research Assistant, University of New Mexico, Dept. of Astronomy 1998 – 2001  
Searching for Companions to Late Type M Stars

- Carried Out Optical Imaging Observations and Analysis of Late-Type M Stars
- Discovered Extra-Solar Planet Using Doppler-shifted TiO measurement

## **Honors:**

Secretary of Energy Achievement Award – GBD III Monitoring System Team 2018  
New Mexico Scholars Scholarship, University of New Mexico 1996 – 2000