Dan Krista-Kelsey

SUMMARY

As a **Junior Data Analyst** at MetaPhase Consulting, I leverage a strong background in **Astrophysics** and **data analysis techniques**. My experience includes **advanced statistical modeling** and **computational research**, focusing on extracting insights from complex datasets. I excel in **analytical programming, quantitative big data, and project management**, effectively collaborating with teams to **drive data-driven decisions**. With a **Public Trust security clearance**, I am dedicated to continuous learning and professional growth in the dynamic field of **data analytics**. I current work on the CISA School Safety Task Force contract, managing operational processes and acting as a data specialist.

CURRENT COMPANY & LOCATION
MetaPhase Consulting
Remote: Stamford, CT

CURRENT POSITION
Junior Data Analytics Analyst / Consultant

EDUCATION
University of Massachusetts Amherst
B.S. Astrophysics; Astronomy, Physics
May 2023

RELEVANT CERTIFICATIONS AND PROFESSIONAL DEVELOPMENT
N/A

RELEVANT WORK EXPERIENCE

Junior Data Analytics Analyst - Consultant
MetaPhase Consulting – 02/2024 - Present

As a reliable and trusted team member on the School Safety Task Force (SSTF) CISA DHS contract at MetaPhase Consulting, I lead client projects, deliver data-driven solutions, foster collaborative relationships, and drive high-quality deliverables that align with the client's strategic goals.

- Spearheaded the 2024 Content Assessment project by developing custom data manipulation strategies and scripts, using Python, PowerShell, and VBA to analyze and assess client resources, ultimately producing an audit report delivered to CISA and SSTF partners.
- Designed and implemented advanced data solutions with Python, PowerShell, and VBA to expand the analytical capabilities of the federal team, with findings incorporated into high-level reports for CISA and DHS leadership.
- Led a team overseeing over 100 communication campaigns across Communications and Partnership branches, coordinating stakeholder inquiries, managing operational logistics, and enhancing client relations.
- Delivered numerous executive briefings, analytical reports, and dashboards for the National Summit on K-12 Safety and Security, leveraging advanced data visualization and statistical tools, while using Excel and PowerBI to present actionable insights on key initiatives.
- Actively engaged MPC peers in client projects, fostering a collaborative "one team" approach that strengthened delivery quality and contributed to multiple recognitions from client leadership.
- Developed an analytics dashboard using Google Analytics to track product consumption, usage, and engagement to drive data and strategy decisions on future products and topics.
- Created numerous processes to improve client's inbox management, cutting down over 80% of the management time cost using automated processes and inbox features, using Outlook, Office Scripts, and Power Automate, and created a centralized stakeholder database to more effectively streamline outreach and engagement.
- Worked on numerous contract pipelines to better government contract acquisition by developing detailed project portfolio descriptions and creating job posting descriptions

Researcher
University of Massachusetts Amherst – 02/2021-07/2023
Conducted astrophysics research focused on developing computational techniques to identify low-intensity radio sources, contributing to evolving models of the radio galaxy population.

- Developed a new approach to computationally extract the static background radio source population in astronomical datasets utilizing advanced mathematical, statistical, and astronomical techniques.
- Incorporated Levy-statistics with radio technique "probability of deflection" to theoretically obtain low-intensity population.
- Built a Bayesian model in Python and implemented the Markov Chain Monte Carlo algorithm with integrated statistical analysis on the flattened sample chain to produce final results.
- Achieved accurate results that both extends and agrees with the radio galaxy population counts at the distinct and countable flux density threshold for the CHILES Con Pol dataset, providing the constraints for a future evolutionary model.
- Presented research to the Massachusetts Undergraduate Research Conference (2023) and the FCAD Thesis Talk (2023).
- Resulting in authoring "The CHILES Continuum & Polarization Survey: Survey Design and Noise Characterization" Luber et al. (2024, submitted to APJ)

Teaching Assistant
Department of Astronomy, UMass – 02/2023 – 05/2023
Supported an advanced data analysis course, providing guidance on astronomical datasets and coding techniques to aid student understanding of research methods.

- Assisted in developing an advanced research-based course based on hands-on real world data analysis with the COSMOS2020 survey and the CHILES Con Pol dataset.
- Advised students on research techniques, assisted in teaching CARTA to probe astronomical datasets, and provided coding and astronomy knowledge assistance during class and office hours.

Tutor
Department of Astronomy, UMass – 02/2021 – 05/2023
Led the Astronomy Help Desk, supporting students with academic items.

- Facilitated the Astronomy Help Desk to assist astronomy and physics students in their courses and labs by incorporating analytical and visual teaching methods while providing digestible problem-solving techniques

Logistics Coordinator
Asian American Student Association – 12/2020 – 05/2023
Coordinated and lead the largest student-run organization at UMass by managing the events team, upkeeping backend operations, and being a liaison between the organization and UMass administration.

- Spearheaded monthly events and coordinated event logistics with the events team and the school's logistics administration.
- Aided in grant and scholarship applications and management totaling $50,000+, increasing the club's budget by 200%.
- Assisted in organizing 3 annual cultural showcases, budget management for the event, and planned raffle giveaways from sponsors, all culminating to a peak attendance of 4,000 with successful performances and celebrity appearances.

- Administered, along with the board, the hiring of 20+ board members from a collective pool of 200+ candidates over all school semesters through interviews in a professional setting and trained the new members within the coordination team.

Research Intern
Five-College Astronomy Department – 05/2022 – 08/2022

Developed a model to analyze radio source confusion in astronomical datasets, securing a NASA MA Space Grant Fellowship and presenting findings at a research symposium.

- Formulated a project entailing extracting source confusion in CHILES Continuum Polarization radio dataset using population statistics, and successfully granted the NASA MA Space Grant Fellowship through a proposal.
- Modeled a mock sky image generating model that incorporated the Metropolis-Hastings algorithm, Gaussian thermal instrument noise, kernel convolution for point spread functions, and Fourier transformation cuts to mimic 'CLEANed' data.
- Utilized the model to compare and probe the source confusion in astronomical data and presented research findings to the FCAD Undergraduate Research Symposium (2022).
- Created a research proposal incorporating topic background that served as the backbone for the undergraduate honors thesis.

EDUCATION

University of Massachusetts Amherst May 2023

B.S. Astrophysics; Astronomy, Physics; Amherst, MA

- GPA: 3.8
- Course Highlights: Statistical Mechanics, Quantum Mechanics, Electricity & Magnetism, Classical Mechanics, Computational Physics, Cosmology & General Relativity, Physics Labs (Senior, Thermodynamics, E&M, Modern)
- Awards: NASA MA Space Grant Fellowship, Astronomy Award for Academic Excellence, Van Blerkom Scholarship, 6x Dean's List

Thesis: "Characterization of the Source Confusion in the CHILES Con Pol Ultra Deep Radio Continuum"

CERTIFCATIONS

N/A

RELEVANT SKILLS

Technical Skills: Python, Google/Microsoft 365 Suites, Astronomy Imagers. Novice: Java, AutoCAD, R, MATLAB, Arduino, VBA, PowerShell, Applied AI Tools

General: Analytical Programming, Technical and Research Writing, Data Analysis, Scientific R&D, Quantitative Big Data, Project Management