

OPEN INNOVATION ■ RESPONSIBLE TECH ■ STARTUPS

Mission-oriented innovator with broad experience advancing science and tech at scale by enabling inclusive communities in academia, government, venture studios, and corporate environments. Biased towards action with an emphasis on excellence through diverse collaboration. Jobs-to-be-Done strategist, rooted in people-first empathy.

EXPERIENCE

LG NOVA, LG ELECTRONICS NORTH AMERICAN INNOVATION CENTER

DIRECTOR OF NEW VENTURES, ENTREPRENEUR-IN-RESIDENCE, INCUBATION TEAM

May 2022 – present | 📍 Santa Clara, CA office (remote)

- Ideate, validate, and incubate joint business concepts between LG Electronics and external startup founders to co-create high impact solutions in the renewable energy, sustainability, energy equity, and electric mobility sectors via lean innovation.
- Prepare and deliver investment pitches to LGE executive leadership and plan operations for launching new business units.

WHITE HOUSE PRESIDENTIAL INNOVATION FELLOWS PROGRAM

PRESIDENTIAL INNOVATION FELLOW, SENIOR ADVISOR TO U.S. DEPARTMENT OF LABOR

ENTREPRENEUR-IN-RESIDENCE, OFFICES OF CHIEF INFORMATION OFFICER AND DISABILITY EMPLOYMENT POLICY

Oct 2020 – May 2022 | 📍 Washington, DC (remote)

- Led development of a responsible AI framework for advancing and de-risking modern tech adoption in close collaboration with DOL's Emerging Tech team, Chief Technology Officer, and Chief Innovation Officer to ensure long-term viability and ease of integration into existing business processes.
- Oversaw pilot partnership with a startup using an AI-driven job matching tool for transitioning service members and veterans, provided responsible use and equity assessment and guidance for future projects, and identified and pitched alternatives to DOL senior executives to re-align accomplish intended equity and career support goals.
- Co-lead for the federal AI Community of Practice. Launched the Responsible AI focus area, led strategic plan development, and drove a cross-agency sprint to create AI transparency resources for the government now introduced in five countries.

HIGH ALPHA INNOVATION

SENIOR DATA SCIENTIST

Jul 2020 – Oct 2020 | 📍 Indianapolis, IN

- Worked with corporate intrapreneurs on ideation for new business concepts to innovate through startup and venture studio launch and validated AI/ML technical concepts and initial product roadmaps.
- Designed data product roadmaps and machine learning pipelines for software startups ranging from pre-launch to Series B.

HIGH ALPHA STUDIO

DATA SCIENTIST / MACHINE LEARNING ENGINEER

Oct 2018 – Jun 2020 | 📍 Indianapolis, IN

- Validated B2B SaaS concepts for new businesses in a venture studio environment, prototyped technology, and contributed to business plans to pitch to investors through a rapid "sprint week" process, resulting in five launched and funded startups.
- Led the technical design of architecture for cloud-based (GCP and AWS) data analysis pipelines and developed machine learning models for early-stage B2B SaaS companies in the High Alpha venture studio portfolio aligned with company OKRs.

DATA INTENSIVE RESEARCH IN ASTROPHYSICS AND COSMOLOGY (DIRAC) INSTITUTE, UNIVERSITY OF WASHINGTON

RESEARCH SCIENTIST III, DATA MANAGEMENT, VERA RUBIN OBSERVATORY

Aug 2016 – Oct 2018 | 📍 Seattle, WA

- System Lead for the design and development of a real-time data processing and analysis framework for terabytes of streaming astronomical data, collaborating across five institutions on systems requirements in an Agile environment.

CENTER FOR TRANSLATIONAL DATA SCIENCE, UNIVERSITY OF CHICAGO

DIRECTOR OF THE OPEN SCIENCE DATA CLOUD

Sep 2013 – Jul 2016 | 📍 Chicago, IL

- Managed operations of a petabyte-scale on-prem science cloud, coordinating with systems and software engineers in a matrix organization and overseeing data science programs and services for thousands of researchers across the globe.
- Directed an international data science and cloud computing summer fellowship program and supervised student projects.
- Led the design and launch of a climate data hub with the Open Commons Consortium for NOAA's Big Data open gov project.

EDUCATION

NEW MEXICO STATE UNIVERSITY | PHD, ASTRONOMY

May 2013 | 📍 Las Cruces, NM

UNIVERSITY OF CHICAGO | BA, WITH HONORS, PHYSICS WITH A SPECIALIZATION IN ASTROPHYSICS

May 2007 | 📍 Chicago, IL

SKILLS

Industry Expertise

Lean innovation • Business development
Corporate innovation • Civic tech
Venture studios • Startups • B2B SaaS

Interpersonal

Cross-matrix organizations
Agile development • Mentoring
Public outreach • Technical writing

Technical Fields

Responsible tech • AI fairness
Data management • Cloud pipelines
Smart grid • Astrophysics • MLOps

PROFESSIONAL ENGAGEMENT

Keynote, "Incentivising Good Behaviour" — FWD50 2022	Ottawa, Ontario, Canada Nov 2022
Panelist, "Using Your Tech Skills In Public Service" — Tapia Celebration of Diversity in Computing	Virtual Sep 2021
Speaker, "Cloud architecture for the data scientist" — Indy Cloud Conf 2020	Indianapolis, IN Jun 2020
Speaker, "Building a newsfeed from the Universe" — Kafka Summit 2019	San Francisco, CA Oct 2019
Panelist, Careers in Science — Field Museum's 5th Annual Chicagoland Women in Science Mixer	Chicago, IL Oct 2019
Panelist, "Befriending failure" — Tapia Celebration of Diversity in Computing	Atlanta, GA Sep 2017
Speaker, "Building a community fountain around your data stream" — PyData 2017	Seattle, WA Jul 2017
Panelist, "Turning Big Data into Big Opportunities" — Tapia Celebration of Diversity in Computing	Austin, TX Sep 2016

EQUITY SERVICE

Committee Member — AAS's Committee on the Status of Women in Astronomy (CSWA)	Jun 2017 - Nov 2021
■ Charged with providing recommendations to the American Astronomical Society (AAS) Board of Trustees for practical measures that can be taken to improve the status of women in astronomy and encourage entry into the field.	
Sub-group committee member — CSWA Strategic Plan	Oct 2019 - Nov 2021
■ Charged with writing a cascade model strategic plan for diversity, equity, and inclusion, providing direction for the next 10 years of focus areas supporting women in the astronomical community.	
Sub-group committee member — CSWA Astro2020 Decadal Survey White Papers	Jun 2019 - Dec 2019
■ Co-authored two science white papers on state of the profession to the Astro2020 Decadal Survey on Astronomy and Astrophysics organized by the National Academy of Sciences.	
Diversity Committee — PyData Seattle Conference	Jul 2017
■ Responsible for sponsorships and scholarships for underrepresented attendees.	

VOLUNTEER EXPERIENCE

Diversity Guild Rep — General Services Administration, Technology Transformation Services	Nov 2020 - Nov 2021
Advisor — #BuiltByGirls WAVE Mentoring Program	Jun 2019 - Jun 2021
Editor — AASWomen's Women in Astronomy Newsletter	Aug 2016 - Nov 2021
Mentor — Tanzanian Data Lab + Grindstone Accelerator entrepreneur program	Mar 2021
Mentor — Harvard Computer Society Tech for Social Good Entrepreneurship Wintersession	Jan 2021
STEM gallery volunteer — The Children's Museum of Indianapolis, Beyond Spaceship Earth exhibit	Aug 2019 - Mar 2020
Co-Organizer — PyLadies Seattle and PyData Seattle Meetup Groups	Jan 2017 - Oct 2018
Mentor — New York Academy of Sciences NEXT Scholar Program	Mar 2017 - Aug 2017
Distance Runner — 22 races including 1 marathon and 7 half marathons	