Maria Patterson

@ maria.t.patterson@gmail.com
in linkedin.com/in/mariatpatterson
% mtpatter.github.io   github.com/mtpatter

OPEN INNOVATION ■ TECH TRANSFORMATION ■ STARTUPS

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 and validate joint business concepts between LG Electronics and potential startup partners in the renewable energy, electric mobility, connected health, and smart lifestyles sectors via lean innovation processes.
- 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.
- Led development of usage guidance, resources, and toolkits for employers for implementing equitable AI in the workplace.
- 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 as co-lead for the AI Community of Practice.

HIGH ALPHA INNOVATION
SENIOR DATA SCIENTIST
Jul 2020 – Oct 2020 | ♀ Indianapolis, IN
- Led AI/ML business ideation in partnership with large organizations to innovate through startup and venture studio launch.
- 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
- Designed and validated B2B SaaS concepts in a venture studio environment, prototyped technology, and developed 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.

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.
- Led the production deployment of real-time data streaming technology for an international telescope collaboration project, which processes data from one million astronomical objects in the sky each night and is hardened at 10x scale.

CENTER FOR DATA INTENSIVE SCIENCE, UNIVERSITY OF CHICAGO
DIRECTOR OF THE OPEN SCIENCE DATA CLOUD
Sep 2013 – Jul 2016 | ♀ Chicago, IL
- Directed operations of a petabyte scale "data commons", managing an on-prem cloud and data science services for thousands of researchers across the globe and coordinating with systems and software engineers in a matrix organization.
- Directed an international data science and cloud computing summer fellowship program and supervised student projects.
- Led the design and launch of a 300 TB open data hub with the Open Commons Consortium for NOAA's Big Data Project.

EDUCATION

NEW MEXICO STATE UNIVERSITY | PʜD, Aꜱᴛʀᴏɴᴏᴍʏ
May 2013 | ♀ Las Cruces, NM

UNIVERSITY OF CHICAGO | BA, ᴡɪᴛʜ Hᴏɴᴏʀꜱ, Pʜʏꜱɪᴄꜱ ᴡɪᴛʜ ᴀ ꜱᴘᴇᴄɪᴀʟɪᴢᴀᴛɪᴏɴ ɪɴ Aꜱᴛʀᴏᴘʜʏꜱɪᴄꜱ
May 2007 | ♀ Chicago, IL

SKILLS

Industry Specific Expertise	Interpersonal	Technologies
Lean startup ▪ Business development	Cross-matrix organizations	AI/ML languages: Python, R, SQL
Corporate innovation ▪ Startups	Agile development ▪ Mentoring	Data management: Docker, Kafka
Product management ▪ AI/ML	Public outreach ▪ Technical writing	Clouds: AWS, Google Cloud Platform

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

ADVISORY AND COMMITTEE 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.

Planning Committee — PyData Seattle Conference   Jun - Jul 2017
 ▪ Scientific organizer and reviewer for conference speaker proposals.

Diversity Committee — PyData Seattle Conference   Jul 2017
 ▪ Responsible for sponsorships and scholarships for underrepresented attendees.

VOLUNTEER EXPERIENCE AND EXTRACURRICULARS

Advisor — #BuiltByGirls WAVE Mentoring Program   Jun 2019 - present
Member — American Astronomical Society's Committee on the Status of Women in Astronomy   Jun 2017 - Nov 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