

## PROFESSIONAL PROFILE

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Data Scientist with a strong foundation in applied machine learning, statistical experimentation, and scalable data infrastructure. Experienced in building and deploying custom ML solutions in production, including containerized systems and cloud-based pipelines. Skilled in collaborating across engineering, analytics, and product teams to translate business needs into measurable, data-driven outcomes. Eager to explore how emerging technologies like AI can responsibly enhance transparency, deepen public engagement, and support investigative work that serves the public interest.

## WORK EXPERIENCE

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### Booz Allen Hamilton

Pittsburgh, PA

Senior Data Scientist

01/2025 – Present

- Conducted Bayesian inference in Python to evaluate risk related to process improvement initiative, ultimately identifying a 7.7% increase in efficiency while not introducing additional risk to the process
- Developing a custom Python library to promote automated, repeatable analysis of survey responses, using SQLAlchemy to interact with a PostgreSQL Database
- Conduct exploratory analysis for multiple clients to support short-notice data requests and improve decision-making

Data Scientist

05/2024 – 01/2025

- Conducted descriptive statistical analysis on PostgreSQL databases, containing millions of rows, using PostgreSQL and Python
- Implemented a containerized AWS Lambda function that utilized a serialized machine learning algorithm, improving client's ability to prepare for events by automating previously manual tasks
- Developed audio-based anomaly detection algorithms to identify improperly tightened lug nuts on race car wheels
- Built a custom ETL pipeline to process survey results and prepare data for a Tableau dashboard, allowing clients to make real-time decisions as surveys were completed
- Developed Streamlit dashboard and built data pipeline to ingest survey data from 26 data sources
- Introduced feature flagging/feature toggling approach to client application
- Mentored two interns, working with them on project and professional development goals

### UPMC

Pittsburgh, PA

IT Manager

01/2022 – 03/2023

- Implemented DevOps Research and Assessment (DORA) metrics, driving process improvements through data-driven insights and enabling local experimentation among 10+ cross-functional development teams containing over 100 individuals

Systems Analyst – Team Lead

03/2020 – 01/2022

- Created an internal survey to assess team culture, and developed a data-driven tool using Power BI and Python to facilitate teams in utilizing survey results for informed decision-making

Systems Analyst – Senior

03/2018 – 03/2020

- Implemented an automated release management process using Azure Pipelines, streamlining workflows and reducing manual interventions

### Earlier Experience in Tech, Operations, and Project Management (2011–2018)

Multiple locations, USA

Held progressive roles in systems analysis, strategic sourcing, process engineering, and project management across multiple companies and industries. Key achievements include managing multi-million dollar contracts, implementing Lean Six Sigma process improvements, leading agile teams, and optimizing operational workflows and inventory management. Demonstrated strong skills in stakeholder collaboration, cost reduction, and team leadership.

## EDUCATION

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**University of California, Berkeley** – Master of Information and Data Science 05/2024

*Relevant Courses:* Behind the Data: Humans and Values, Experiments and Causal Inference, Privacy Engineering, Applied Machine Learning, Data Engineering, Statistics for Data Science, Data Science Programming, Research Design and Applications for Data and Analysis

Selected Projects:

**AI4AQ: Addressing Air Quality in the Salt Lake Region** 04/2024

Developed a machine learning-driven dashboard and, using multiple data sources, built a data pipeline using AWS services, as well as a CI/CD pipeline to keep the dashboard current

**Responsible AI: Comprehensive Incident Management Framework** 12/2023

Addressed rising concerns of AI-related incidents by proposing an emphasis on learning, collaboration, and restorative justice. Utilized Python for analysis of the Artificial Intelligence Incident Database (AIID)

**Chess Banter: Does engaging with an opponent in online chess impact their performance?** 12/2023

Researched the causal effect of online chess interaction on opponent performance through a novel experiment, employing R, Python, Selenium, the OpenAI API, and the lichess.org API for data collection and analysis

**Penn State University** – B.S. Supply Chain & Information Systems, Minor Information Systems Management 05/2011

## SKILLS AND TOOLS

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**Programming Languages:** Python (Pandas, NumPy, SciPy, Matplotlib, Seaborn, ScikitLearn, TensorFlow, Keras, PyTorch), Bash, PowerShell

**AI Tools:** OpenAI API, prompt engineering, LLM evaluation

**Statistical Tools:** R, Stata

**Development Tools:** Git, GitHub, Jupyter, VS Code, RStudio, RMarkdown, Post Workbench, pgAdmin

**Data Analysis & Visualization:** Excel, Tableau, Power BI, Google Analytics, Google Ads

**Database Technologies:** SQL (PostgreSQL, MySQL)

**Containerization:** Docker, AWS ECR

**Operating Systems:** Windows, Linux

**Agile Methodologies:** Agile, Scrum, SAFe

**DevOps Tools:** Azure DevOps, Jira, GitHub Projects

**Cloud Services:** AWS, Azure

## COMMUNITY INVOLVEMENT

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**Humane Action Pittsburgh (HAP)** Pittsburgh, PA

*Strategic Analyst* 12/2022– Present

- Wrote the [Privacy Policy](#), informing individuals of data use, practices, and rights
- Collect, organize, and analyze data to support initiatives across HAP

**Humane Animal Rescue** Pittsburgh, PA

*Dog Walking/Behavior Volunteer* 04/2019 – 06/2022

**Furkid Rescue** Bethel Park, PA

*Foster Parent* 11/2017 – 05/2020

**Humane Rescue Alliance** Pittsburgh, PA

*Behavior, Training, and Socialization Volunteer* 04/2013 – 07/2017

*Foster Parent* 04/2013 – 02/2017