

ELDIN SAHBAZ

Denver, Colorado, USA
+1 (607) 597-9607 | sahbaz.eldin@gmail.com
linkedin.com/in/eldinsahbaz | github.com/eldinsahbaz

SUMMARY

- Experienced Program Manager and Data Scientist with **7+ years of experience** establishing and scaling enterprise-level Agile teams — spearheading substantial AI-driven initiatives across multiple organizations.
- Led the team's **63% market share** in AI initiatives across British Petroleum's US onshore O&G business and independently produced **US\$20MM in annual value**. Delivered **patent-pending** AI solutions in computational chemistry — **valued at US\$500k+ annually** — for INFICON's Semiconductor business.

PROFESSIONAL EXPERIENCE

Senior Data Scientist; Program Manager
British Petroleum (BP)

February 2023 – Present
Denver, Colorado

- Directed and executed strategy for BP US onshore Data Science and ML Engineering — **achieving 47% market share** in Exploration & Development and enabling the team's **63% market share** across the division.
- Generated **US\$20MM annually** in value for Reservoir Engineering's EOR initiatives — **delivering the ML Refracting Estimator** and increasing confidence in the Business Unit's Development program by **500%**.
- Launched the **strategic partnership** with Subsurface Technology for **Geophysics & Geoscience**, modeling unconventional depositional systems — expected to yield **US\$5.5MM annually** for an asset program.
- Managed and deployed the Long-term Production Risk Assessment Simulation tool for Reservoir Engineering.
- Oversaw the AWS migration for PowerBI reports monitoring the Productivity Index and Saltwater Disposal.

Data Scientist
INFICON

June 2018 – February 2023
Syracuse, New York

- Delivered **patent-pending advances** for semiconductor sensor technologies and **provisioned Neural Processing Units** for next-generation sensors — driving annual cost reductions forecasted **in excess of US\$500k**.
- Invented the Bijective Neural Architecture for density estimation — yielding a **95% increase** in accuracy.
- Led efforts defining mathematical foundations for signal processing algorithms and designed A/B tests using SciPy.stats and Nolds — delivering a **21% increase** in sensor fidelity using SciPy.optimize and Statsmodels.
- Established KPIs and executed A/B tests with simulated chemical data via PySwarms, SciPy.optimize, SciPy.stats, and SciPy.integrate — attaining **50% coverage** across chemical detection/monitoring systems.

PATENTS & PUBLICATIONS

Method of Auto Tuning One or More Sensors
U.S. Patent and Trademark Office

August 2022
Patent Pending

PROFESSIONAL DEVELOPMENT

Core Analysis Workshop
UT Austin Bureau of Economic Geology

April 2024/December 2023

EDUCATION

Syracuse University
Master of Science | Computer Science

May 2018

Syracuse University
Bachelor of Science | Computer Science

May 2017
Summa Cum Laude

SKILLS & COMPETENCIES

Software & Tools AWS SageMaker, Linux, Git, Python, PyTorch, Scikit-learn, Statsmodels, Pandas, SciPy, NumPy, NLTK, Gensim, OpenCV, Seaborn, Matplotlib, SLB Techlog

Competency Areas AI, Deep Learning, Machine/Statistical Learning, Linear & Nonlinear Modeling, Numerical Optimization, Regression, Classification, Statistics, Probability, Time Series, Statistical Signal Processing, Data Analysis, Data Mining, Agile, CRISP-DM