

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 February 2023 – Present
British Petroleum (BP) *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 the 2BSS 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 June 2018 – February 2023
INFICON *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 August 2022
U.S. Patent and Trademark Office *Patent Pending*

PROFESSIONAL DEVELOPMENT

Core Analysis Workshop April 2024/December 2023
UT Austin Bureau of Economic Geology

EDUCATION

Syracuse University May 2018
Master of Science | Computer Science

Syracuse University May 2017
Bachelor of Science | Computer Science *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