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 Agile enterprise–level 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

Program Manager November 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.
· 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.

Senior Data Scientist February 2023 – Present
British Petroleum (BP) *Denver, Colorado*

· Generated **US$20MM annually** in value for Reservoir Engineering's EOR initiatives — **delivering the ML Refracturing 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.

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

Advanced Power BI — Power Query and DAX April 2023
Havens Consulting

Power BI — Reporting and Model Building February 2023
Havens Consulting

Machine Learning for Model Predictive Control & Process Analytics June 2019
Dr. S. Joe Qin

INVITED PRESENTATIONS

Improving Mass Spectrometry Signal Fidelity November 2020
INFICON Data Analytics Summit

Introduction to AI and Machine Learning November 2020
INFICON Data Analytics Summit

Automatic Text Summarization — Deep Learning & Classical Approaches April 2018
Syracuse University iSchool Poster Session

Characterizing Popularity Growth for Social Media Content August 2017
Electrical Engineering & Computer Science REU Seminar

HONORS & AWARDS

Graduate Merit Scholarship August 2017 – May 2018
Syracuse University

Summa Cum Laude May 2017
Syracuse University

The Warren Semon Prize May 2017
Syracuse University

Dean's Leadership Grant September 2014
Syracuse University

Dean's List August 2014 – May 2017
Syracuse University

The Founders' Scholarship August 2014 – May 2017
Syracuse University

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