ELDIN SAHBAZ

Denver, Colorado, USA

+1 (607) 597-9607 | sahbaz.eldin@gmail.com

linkedin.com/in/eldinsahbaz | github.com/eldinsahbaz

SUMMARY

Program Manager and Data Scientist delivering **$1B+** with **8 years of proven experience**. Established and scaled enterprise–level Digital Transformation initiatives across the Petroleum and Semiconductor industries. Personally **realized $997MM** for British Petroleum and enabled Data Science's **69% AI/ML market share** within US Onshore Upstream O&G. Produced **$500M+** via a **patent–pending** computational chemistry solution for INFICON's Semiconductor business.

PROFESSIONAL EXPERIENCE

Program Manager — November 2023 – Present
British Petroleum (BP) — *Denver, Colorado*

· Acquired **52% of Exploration & Development's AI/ML market** and enabled the team's **69% AI/ML market share** across the organization — spearheading **in–house AI development & Digital Transformation strategy**.
· Delivered **100% of the Q2/Q3 Agile Features** in Data Science, Generative AI, and Machine Learning Engineering
· Architected key partnerships with the **Subsurface Technology Team** and the **Head of Performance Optimization**.
· Orchestrated internal forums with Digital Transformation Leaders across **Saudi Aramco**, **ADNOC**, and the **U.S. DOE**.

Product Owner — November 2023 – Present
British Petroleum (BP) — *Denver, Colorado*

· Realized **$4MM in annual cost reductions** — prioritizing developer resources to build and deploy **ML Sand Flowback**.
· Coordinated stakeholder timelines and prioritized developer resources — **launching ML Drilling AFE Cost Prediction**.
· Productionalized **Long–term Production Risk for Subsurface Technology Reservoir Engineering** via Streamlit.
· Coordinated between **BP** and the **US Department of Energy** on integrating technology for produced water optimization.
· Oversaw the Azure to AWS cloud migration for the **Salt Water Disposal** and **Productivity Index** Power BI reports.

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

· Generated **$977MM** for Permian with a **$700MM NPV** well development plan and **$277MM** Drilling & Completions cost reductions by productionalizing Techlog **AI Electrofacies** — enabling well prospecting and fluid mobility assessments.
· Drove **$20MM NPV in annual value** for Eagle Ford Reservoir Engineering and achieved a **500% increase** in efficiency for well prospecting & assurance workflows — launching **ML Refracturing Production Forecasting** via Streamlit.
· Deployed **Permian AI Completions Optimization** — delivering a high–impact Reservoir Engineering toolkit.
· Collaborated with **Subsurface Technology** to address Eagle Ford wellbore instability — projecting a **$60MM** cost savings.

Data Scientist — June 2018 – February 2023
INFICON — *Syracuse, New York*

· Directed **$500M+** in forecasted **annual cost reductions** and **provisioned Neural Processing Units** to support **patent–pending** Automated Sensor Calibration advances directly on next–generation semiconductor sensor technologies.
· Led a **21% enhancement** in Mass Spec signal fidelity (SciPy.optimize/Statsmodels), designed A/B Quality Control tests (SciPy.stats/Nolds) for **all Mass Spec sensors**, and documented mathematical foundations for proprietary algorithms.
· Established **50% coverage** across chemical detection and monitoring systems — designing KPIs and executing A/B simulation tests via synthetic GC–MS data generated using PySwarms and SciPy.optimize, SciPy.stats, and SciPy.integrate.
· Achieved a **95% increase** in density estimation accuracy — creating the Bijective Neural Architecture via PyTorch.

Technology Analyst — June 2016 – August 2016
JPMorgan Chase & Co. — *Jersey City, New Jersey*

· Developed project business cases alongside senior team members and deployed code to **live internal JPMC applications**.

Software Engineer — June 2015 – September 2015
Self–employed — *Syracuse, New York*

· Engineered information retrieval systems as a subcontractor for **British Petroleum (BP)** and a **County Government**.

Undergraduate Research Assistant — August 2014 – May 2015
Syracuse University | Hosein Research Group — *Syracuse, New York*

· Awarded the **Dean's Leadership Grant** supporting simulation studies quantifying energy loss across solar cell surfaces.

PATENTS & PUBLICATIONS

Method of Auto Tuning One or More Sensors
USPTO Application 18/686,753

August 2023
Patent Pending

INVITED PRESENTATIONS

Neural Attention for Seismic Data Processing
BP Geophysics R&D Seminar

July 2024

Improving Mass Spectrometry Signal Fidelity
INFICON Data Analytics Summit

November 2020

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

April 2018

PROFESSIONAL DEVELOPMENT

Core Analysis Workshop
UT Austin Bureau of Economic Geology

April 2024/December 2023

Advanced Power BI — Power Query and DAX
Havens Consulting

April 2023

Power BI — Reporting and Model Building
Havens Consulting

February 2023

HONORS & AWARDS

Graduate Merit Scholarship
Syracuse University

August 2017 – May 2018

Summa Cum Laude
Syracuse University

May 2017

The Warren Semon Prize
Syracuse University

May 2017

Dean's Leadership Grant
Syracuse University

September 2014

Dean's List
Syracuse University

August 2014 – May 2017

The Founders' Scholarship
Syracuse University

August 2014 – May 2017

EDUCATION

Syracuse University
Master of Science | Computer Science

May 2018

Syracuse University
Bachelor of Science | Computer Science

May 2017
Summa Cum Laude

SKILLS & COMPETENCIES

Business Strategy, Business Development, Stakeholder Management, Change Management, Agile, OKRs, CRISP–DM

Technical Artificial Intelligence, Deep Learning, Transfer Learning, Machine Learning, Linear & Nonlinear Modeling, Numerical Optimization, Regression, Classification, Statistics, Probability, Monte Carlo, Time Series, Statistical Signal Processing, Data Collection, Data Preprocessing, Data Analysis, Data Wrangling, Data Mining

Tools Amazon SageMaker, Linux, Git, Python, R, PyTorch, Scikit–learn, Pandas, SciPy, Statsmodels, NumPy, NLTK, Gensim, OpenCV, Seaborn, Matplotlib, SLB Techlog, Atlassian Jira, Azure DevOps