

# ELDIN SAHBAZ

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## SUMMARY

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Program Manager and Data Scientist delivering **\$1.54B** with **8 years of proven experience**. Established and scaled enterprise-level Digital Transformations across the Petroleum and Semiconductor industries. Delivered **core engineering AI solutions** for British Petroleum and enabled Data Science's **69% AI market share** within BP US Onshore Upstream O&G. Produced **\$500M+** via a **patent-pending** computational chemistry solution for INFICON's Semiconductor business.

## PROFESSIONAL EXPERIENCE

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### Program Manager

*British Petroleum (BP)*

November 2023 – Present

*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

*British Petroleum (BP)*

November 2023 – Present

*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

*British Petroleum (BP)*

February 2023 – Present

*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.
- Delivered **\$540MM NPV** for Permian Reservoir Engineering — deploying **AI Completions Optimization** in Streamlit.
- Drove **\$20MM NPV** for Eagle Ford Reservoir Engineering — launching **ML Refracturing Production Forecasting**.
- Collaborated with **Subsurface Technology** to address Eagle Ford wellbore instability — projecting a **\$60MM** cost savings.

### Data Scientist

*INFICON*

June 2018 – February 2023

*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

*JPMorgan Chase & Co.*

June 2016 – August 2016

*Jersey City, New Jersey*

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

### Software Engineer

*Self-employed*

June 2015 – September 2015

*Syracuse, New York*

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

### Undergraduate Research Assistant

*Syracuse University | Hosein Research Group*

August 2014 – May 2015

*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
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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