

# ELDIN SAHBAZ

Denver, Colorado, USA

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## SUMMARY

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Program Manager and Data Scientist with **~8 years of proven success** delivering on Objectives and Key business Results. Established and scaled enterprise-level Digital Transformation initiatives across the Petroleum and Semiconductor industries. Enabled Data Science's **65% overall AI/ML market share** across business functions within British Petroleum's US onshore O&G division (BPX) and independently produced **\$997MM in value**. Delivered **\$500M+ in value annually** via **patent-pending** AI-powered computational chemistry solutions for INFICON's Semiconductor business unit.

## PROFESSIONAL EXPERIENCE

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### Program Manager

*British Petroleum (BP)*

November 2023 – Present

*Denver, Colorado*

- Acquired **45% of Exploration & Development's AI/ML market** and enabled the team's **65% AI/ML market share** across the organization — directing and executing Data Science & ML Engineering Digital Transformation strategy.
- Delivered **all planned Q2 2024 Agile Features** in Data Science and ML Engineering within the project scope.
- Realized **\$4MM in annual cost reductions** — prioritizing resources to build and deploy ML Sand Flowback prediction.
- Coordinated stakeholder timelines and resources — developing and **launching ML Drilling AFE Cost prediction**.

### Product Owner

*British Petroleum (BP)*

November 2023 – Present

*Denver, Colorado*

- Managed and **productionalized Long-term Production Risk Assessment** via Streamlit for Reservoir Engineering.
- Oversaw the Azure cloud to AWS cloud **Salt Water Disposal** and **Productivity Index** report migration.

### Senior Data Scientist

*British Petroleum (BP)*

February 2023 – Present

*Denver, Colorado*

- Generated **\$977MM** for the Permian Business Unit with a well development plan **NPV of \$700MM**, Drilling & Completions cost reductions of **\$250MM**, and core collection avoidance amounting to **\$27MM** — productionalizing **AI Lithofacies Prediction** in Techlog, enabling regional fluid mobility assessments, and facilitating well development prioritization.
- Drove **\$20MM 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.

### 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 — inventing the Bijective Neural Architecture via PyTorch.

### Research Assistant

*Syracuse University | Data Lab*

June 2017 – August 2017

*Syracuse, New York*

- Modeled social media engagement metrics, formulating repeated measures experiments, utilizing Scikit-learn and NLTK.

### 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 for **British Petroleum** and local government clients as a subcontractor.

### 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

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

August 2023  
Patent Pending

INVITED PRESENTATIONS

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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

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Core Analysis Workshop  
UT Austin Bureau of Economic Geology

April 2024/December 2023

Advanced Power BI — Power Query and DAX  
Havens Consulting

April 2023

Machine Learning for Model Predictive Control & Process Analytics  
Dr. S. Joe Qin, President of Lingnan University

June 2019

HONORS & AWARDS

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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

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Syracuse University  
Master of Science | Computer Science

May 2018

Syracuse University  
Bachelor of Science | Computer Science

May 2017  
Summa Cum Laude

SKILLS & COMPETENCIES

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Business Strategy, Business Development, Stakeholder Management, Agile Project Management, 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 AWS SageMaker, Linux, Git, Python, PyTorch, Scikit-learn, Pandas, SciPy, Statsmodels, NumPy, NLTK, Gensim, OpenCV, Seaborn, Matplotlib, SLB Techlog, Atlassian Jira, Azure DevOps