

ELDIN SAHBAZ

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SUMMARY

Program Manager and Data Scientist with **7+ years of proven success** establishing and scaling transformative, enterprise-level, AI/ML initiatives across the Petroleum and Semiconductor industries. Led the Data Science team's **63% market share** in AI developments 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\$500M+ annually** — for INFICON's Semiconductor business.

PROFESSIONAL EXPERIENCE

Senior Data Scientist; Program Manager <i>British Petroleum (BP)</i>	February 2023 – Present <i>Denver, Colorado</i>
<ul style="list-style-type: none">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 <i>INFICON</i>	June 2018 – February 2023 <i>Syracuse, New York</i>
<ul style="list-style-type: none">Directed the Automated Sensor Calibration development program for semiconductor sensor technologies — delivering patent-pending advances driving annual cost reductions forecasted in excess of US\$500M.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 <i>U.S. Patent and Trademark Office</i>	August 2022 <i>Patent Pending</i>
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PROFESSIONAL DEVELOPMENT

Core Analysis Workshop <i>UT Austin Bureau of Economic Geology</i>	April 2024/December 2023
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EDUCATION

Syracuse University <i>Master of Science Computer Science</i>	May 2018
Syracuse University <i>Bachelor of Science Computer Science</i>	May 2017 <i>Summa Cum Laude</i>

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