ELDIN SAHBAZ

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SUMMARY

- Exploration & Development Data Science leader with **7+ years of experience** delivering **multimillion–dollar** initiatives and driving **patent–pending** Artificial Intelligence and Machine Learning solutions.
- Proven ability to direct Data Science strategy, business development, and project management within British Petroleum's (BP) upstream oil & gas division — specializing in the areas of **seismic imaging, reservoir characterization, production forecasting, and drilling & completions efficiency**.

PROFESSIONAL EXPERIENCE

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

· Directed strategy and execution 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$10MM – US$20MM annually** in value for Reservoir Engineering — **delivering the ML Refracturing Estimator** and increasing confidence in the Business Unit's Development program by **500%**.
· Founded **the strategic partnership** with Subsurface Technology and **delivered the Neural Probabilistic Seismic Imaging model** — expected to generate **US$1.5MM annually** in drilling & completions efficiency.
· Championed AI/ML Geoscience initiatives in collaboration with Subsurface Technology for depositional facies modeling — poised to yield an **annual gain of US$5.5MM** to a Business Unit's Development program.

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

· Directed **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*

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, NetworkX

Competency Areas AI, Deep Learning, Machine Learning, Statistical Learning, Linear & Nonlinear Modeling, Numerical Optimization, Regression, Classification, Statistics, Probability, Time Series, Statistical Signal Processing, Data Analysis, Data Mining