

# ELDIN SAHBAZ

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## SUMMARY

Data science leader with 7 years of experience generating quantifiable business results — directing strategy and business development, stakeholder management, project management, and IP development. Demonstrated proficiency in delivering innovative, patent-pending, Artificial Intelligence and Machine Learning solutions.

## PROFESSIONAL EXPERIENCE

### Senior Data Scientist

*British Petroleum (BP)*

February 2023 – Present

*Denver, Colorado*

- Data Science Advisor to the Development Portfolio Managers — identifying effective AI & ML strategies.
- Executed an MoU with Subsurface Technology and launched a collaborative Geophysics effort — generating a **300% increase** in Data Science projects and a projected **17% increase** in successful reservoir exploration.
- Managed an intern's predictive maintenance initiative — forecasting a **11% increase in operational savings**.

### Data Scientist

*INFICON*

June 2018 – February 2023

*Syracuse, New York*

- Directed **patent-pending advances** for semiconductor sensor technologies utilizing Scikit-learn, fastDTW, Statsmodels.tsa, SciPy.stats, SciPy.interpolate, SciPy.optimize, and SQL — **provisioning Neural Processing Units** for next-generation sensors and driving annual cost reductions forecasted **in excess of US\$500k**.
- Invented a bijective neural network for density estimation via PyTorch — yielding a **95% increase** in accuracy.
- Led efforts defining mathematical foundations for signal processing algorithms and designed an A/B test 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.

### Research Experience for Undergraduates

*Syracuse University | Data Lab*

June 2017 – August 2017

*Syracuse, New York*

- Modeled social media popularity via Scikit-learn and NLTK — reaching a **100% increase** in model accuracy.

## PATENTS & PUBLICATIONS

### Method of Auto Tuning One or More Sensors

*U.S. Patent and Trademark Office*

August 2022

*Patent Pending*

## EDUCATION

### Syracuse University

*Master of Science | Computer Science*

May 2018

### Syracuse University

*Bachelor of Science | Computer Science*

May 2017

*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