

ELDIN SAHBAZ

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SUMMARY

- Upstream O&G Data Science leader and Program Manager with **7+ years of experience** — specializing in seismic imaging, reservoir characterization, production forecasting, and drilling & completions efficiency.
- Produced **US\$20MM in annual value** independently and led the team's **63% market share** in AI developments across British Petroleum's US onshore business. Delivered **patent-pending** AI solutions in computational chemistry — **valued at US\$500k+ annually** — for INFICON's Semiconductor business.

PROFESSIONAL EXPERIENCE

Senior Data Scientist; Program Manager

British Petroleum (BP)

February 2023 – Present

Denver, Colorado

- 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 Refracturing 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 an asset program.

Data Scientist

INFICON

June 2018 – February 2023

Syracuse, New York

- Delivered **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

U.S. Patent and Trademark Office

August 2022

Patent Pending

PROFESSIONAL DEVELOPMENT

Core Analysis Workshop

UT Austin Bureau of Economic Geology

December 2023

Advanced Power BI — Power Query and DAX

Havens Consulting

April 2023

Power BI — Reporting and Model Building

Havens Consulting

February 2023

Linux Kernel Internals and Development (LFD420)

The Linux Foundation

December 2019

Machine Learning for Model Predictive Control & Process Analytics

June 2019

Dr. S. Joe Qin

Embedded Linux Development with Yocto Project (LFD460)

June 2018

The Linux Foundation

INVITED PRESENTATIONS

Improving Mass Spectrometry Signal Fidelity

November 2020

INFICON Data Analytics Summit

Introduction to AI and Machine Learning

November 2020

INFICON Data Analytics Summit

Automatic Text Summarization — Deep Learning & Classical Approaches

April 2018

Syracuse University iSchool Poster Session

Characterizing Popularity Growth for Social Media Content

August 2017

Electrical Engineering & Computer Science REU Seminar

HONORS & AWARDS

Graduate Merit Scholarship

August 2017 – May 2018

Syracuse University

Summa Cum Laude

May 2017

Syracuse University

The Warren Semon Prize

May 2017

Syracuse University

Dean's Leadership Grant

September 2014

Syracuse University

Dean's List

August 2014 – May 2017

Syracuse University

The Founders' Scholarship

August 2014 – May 2017

Syracuse University

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