ELDIN SAHBAZ

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SUMMARY

Program Manager and Data Scientist with **~8 years of proven success**. Established and scaled enterprise–level Digital Transformation initiatives across the Petroleum and Semiconductor industries. Enabled Data Science's **67% overall AI/ML market share** within British Petroleum's US Onshore Upstream O&G division (BPX) and independently produced **$997MM in value** — accounting for **>98% of the team's total impact**. Delivered **$500M+ in value annually** via **patent–pending** AI–powered computational chemistry solutions for INFICON's Semiconductor business unit.

PROFESSIONAL EXPERIENCE

Program Manager
British Petroleum (BP plc)
November 2023 – Present
Denver, Colorado

· Acquired **48% of Exploration & Development's AI/ML market** and enabled the team's **67% 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 developer resources — **launching ML Drilling AFE Cost prediction**.

Product Owner
British Petroleum (BP plc)
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 plc)
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

Method of Auto Tuning One or More Sensors   August 2023
USPTO Application 18/686,753   *Patent Pending*

INVITED PRESENTATIONS

Neural Attention for Seismic Data Processing   July 2024
BP Geophysics R&D Seminar

Improving Mass Spectrometry Signal Fidelity   November 2020
INFICON Data Analytics Summit

Automatic Text Summarization — Deep Learning & Classical Approaches   April 2018
Syracuse University iSchool Poster Session

PROFESSIONAL DEVELOPMENT

Core Analysis Workshop   April 2024/December 2023
UT Austin Bureau of Economic Geology

Advanced Power BI — Power Query and DAX   April 2023
Havens Consulting

Machine Learning for Model Predictive Control & Process Analytics   June 2019
Dr. S. Joe Qin, President of Lingnan University

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

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	Amazon SageMaker, Linux, Git, Python, R, PyTorch, Scikit–learn, Pandas, SciPy, Statsmodels, NumPy, NLTK, Gensim, OpenCV, Seaborn, Matplotlib, SLB Techlog, Atlassian Jira, Azure DevOps