

# ELDIN SAHBAB

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## SUMMARY

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Data science leader with 6+ years of experience generating quantifiable business results — directing business development, stakeholder management, project management, cross-functional collaboration, and IP development. Demonstrated proficiency in delivering innovative Artificial Intelligence and Machine Learning solutions.

## PROFESSIONAL EXPERIENCE

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### Senior Data Scientist

BP

February 2023 – Present

Denver, Colorado

- Managed business development and executed an MoU with Subsurface Technology — projecting an immediate **>300% increase** in project intake and a **17% increase** in unconventional reservoir exploration successes.

### 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, and SciPy.optimize — **provisioning Neural Processing Units** for next-generation sensors and driving annual cost reductions forecasted to be **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

June 2017 – August 2017

Syracuse, New York

- Conducted research under the supervision of Dr. Reza Zafarani (Electrical Engineering and Computer Science).
- Modeled social media popularity via Scikit-learn and NLTK — reaching a **100% increase** in model accuracy.

## PATENTS & PUBLICATIONS

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### Method of Auto Tuning One or More Sensors

U.S. Patent and Trademark Office

August 2022

Patent Pending

## EDUCATION

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### Syracuse University

Master of Science | Computer Science

May 2018

### Syracuse University

Bachelor of Science | Computer Science

May 2017

Summa Cum Laude

## SKILLS & COMPETENCIES

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**Software & Tools** Python, PyTorch, Scikit-learn, Statsmodels, Pandas, SciPy, NumPy, NLTK, Gensim, OpenCV, Seaborn, Matplotlib, NetworkX, AWS, SageMaker, Power BI, Linux, Git

**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