ELDIN SAHBAZ

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SUMMARY

Recognized data science leader with quantifiable business results in cost reduction, profitability improvement, and process optimization — developing innovative state–of–the–art AI–powered solutions. Demonstrated experience scoping and leading projects, designing robust unbiased studies and experiments, analyzing time series and signals, composing custom machine learning and artificial intelligence models/algorithms, interfacing with cross–functional teams and communicating insights to stakeholders, and deploying models to production.

PROFESSIONAL EXPERIENCE

Data Scientist   June 2018 - Present
INFICON   *Syracuse, New York*

· Directed technical developments with significant manufacturing optimization innovations for semiconductor sensor technologies utilizing the fastDTW, Nolds, Statsmodels.tsa, SciPy.interpolate, and SciPy.optimize Python libraries — driving projected annual manufacturing cost savings in excess of US$500k.

· Led technical reviews to define mathematical foundations for sensor processing algorithms — documenting their implementation logic and assumptions, designing an A/B test using SciPy.stats and Nolds, and delivering an improved algorithm using SciPy.optimize and Statsmodels — yielding a 21% increase in sensor accuracy.

· Managed studies examining and establishing theoretical foundations for chemical detection and monitoring systems — contributing to a larger product development effort with 52% expected revenue growth.

· Executed simulation–based A/B tests for compound identification with 50% chemical detection and monitoring system coverage — synthesizing chemical data via SciPy.optimize, SciPy.stats, SciPy.integrate, and PySwarms.

INVITED PRESENTATIONS

Data Science for the Mass Spectrometer   November 2020
INFICON Data Analytics Summit

Get Started with Machine Learning and AI Today!   November 2020
INFICON Data Analytics Summit

Approaches to Automatic Text Summarization   April 2018
Syracuse University iSchool Poster Session

EDUCATION

Syracuse University   *May 2018*
Master of Science | Computer Science

Syracuse University   *May 2017*
Bachelor of Science | Computer Science   Summa Cum Laude

SKILLS & COMPETENCIES

Programming Languages	Python, MATLAB, R, SQL, C++
Software & Tools	PyTorch, Scikit–learn, Statsmodels, Pandas, SciPy, NumPy, NLTK, Gensim, openCV, Nolds, Seaborn, Matplotlib, NetworkX, billiard, ctypes, Linux, Git
Competency Areas	AI, Deep Learning, Machine Learning, Statistical Learning, Linear Modeling, Nonlinear Modeling, Numerical Optimization, Regression, Classification, Statistics, Probability, Time Series Analysis, Statistical Signal Processing, Data Analysis, Data Mining, Data Visualization, Algorithms, Design Patterns