ELDIN SAHBAZ

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SUMMARY

Recognized data science leader generating quantifiable business results in cost reduction, profitability improvement, and process optimization — delivering 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 significant technical advances in manufacturing optimization for semiconductor sensor technologies via machine learning for time series utilizing the fastDTW, Statsmodels.tsa, SciPy.stats, SciPy.interpolate, and SciPy.optimize libraries — promoting efficiency and driving projected annual cost savings in excess of US$500k.

· Led technical reviews to define mathematical foundations for sensor processing algorithms — documenting their premises and implementation logic, 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 expected to yield 52% revenue growth.

· Executed simulation–based A/B tests using synthetically generated chemical data via PySwarms, SciPy.optimize, SciPy.stats, and SciPy.integrate — yielding 50% coverage across chemical detection and monitoring systems.

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

Automatic Text Summarization — Deep Learning & Classical Approaches 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