ELDIN SAHBAZ

Syracuse, New York, USA

+1 (607) 597–9607 ⋄ sahbaz.eldin@gmail.com

eldin.home.blog ⋄ linkedin.com/in/eldinsahbaz ⋄ github.com/eldinsahbaz

SUMMARY

Recognized data science leader with a proven track record of delivering innovative solutions and intelligent algorithms for chemical sensing technologies. Experienced in planning and scoping research projects, designing experiments, analyzing time series and signals, developing custom machine learning and artificial intelligence models, communicating insights to stakeholders, and interfacing with cross-functional teams to deploy models to production. Produced state–of–the–art solutions for semiconductor sensor technologies — generating a 21% gain in sensor accuracy and optimizing manufacturing with annual projected cost savings above US$500k.

PROFESSIONAL EXPERIENCE

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

· Led significant innovations in manufacturing optimization for semiconductor sensor technologies utilizing fast-DTW, Nolds, SciPy.interpolate, and SciPy.optimize — projecting annual cost savings in excess of US$500k.
· Directed 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.
· Created simulation–based compound identification A/B tests covering 50% of the chemical detection and monitoring systems — synthesizing chemical data via SciPy.optimize, SciPy.stats, SciPy.integrate, and PySwarms.
· 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.

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