

ELDIN SAHBAZ

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SUMMARY

Accomplished data scientist with three years of progressive professional experience in a multinational company. Proven ability to plan and lead research efforts, design experiments, analyze time series and signals, conduct algorithmic research and development in artificial intelligence and machine learning, and communicate insights to stakeholders. Applied expertise in modeling complex chemical processes via physics and electrical sensor data. Among other accomplishments, successfully improved mass spectrometry signal quality — reducing error by 21%.

PROFESSIONAL EXPERIENCE

Engineer
INFICON

Research & Development

June 2018 - Present
Syracuse, New York

- Delivered updates and status reports to the Senior Director of Development for Intelligent Sensor Solutions (ISS).
- Applied data science expertise to mass spectrometry sensors and systems as a part of INFICON's ISS R&D group.
- Collaborated with stakeholders to elucidate tangible research objectives from high-level problem statements.
- Lead and planned data science initiatives in a cross-functional environment — completing 10 studies and projects.
- Counseled internal R&D teams, e.g., facilitated literature searches, discussed approaches, and partook in reviews.
- Mined, analyzed, visualized, and communicated data to stakeholders — creating and enhancing internal processes.
- Conceptualized and instituted AI technologies and data infrastructure for mass spectrometry sensor enhancement.
- Coordinated with physical scientists to integrate domain expertise into the experiments and predictive models.
- Interfaced with software engineers to facilitate migrating algorithmic research and findings to existing technologies.
- Audited sensor performance via simulation studies — covering 58% of chemical detection and gas analysis sensors.
- Improved mass spectrometry sensor performance and signal quality with a 21% reduction in estimation error.
- Presented signal processing research and results at the company-wide INFICON Data Analytics Summit.

PRESENTATIONS

Data Science for the Modular Mass Spectrometer
INFICON Data Analytics Summit

November 2020

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

November 2020

Approaches to Automatic Text Summarization
Syracuse University iSchool Poster Session

April 2018

EDUCATION

Syracuse University
Postgraduate ◇ Mathematics

February 2021 - May 2021

Syracuse University
Master of Science ◇ Computer Science

August 2017 - May 2018

Syracuse University
Bachelor of Science ◇ Computer Science

August 2014 - May 2017
Summa Cum Laude

SKILLS & COMPETENCIES

Programming Languages Python, MATLAB, R, SQL, C++

Certificates Linux Kernel Internals and Development (LFD420)

Software & Tools PyTorch, Scikit-learn, Statsmodels, Pandas, SciPy, NumPy, Matplotlib, Linux, Git

Competency Areas AI, Deep Learning, Machine Learning, Statistical Learning, Linear & Nonlinear Modeling, Regression, Classification, Statistics, Probability, Time Series Analysis, Statistical Signal Processing, Data Analysis, Data Mining, Data Visualization

Soft Skills Communication, Teamwork, Decision Making, Project Planning, Time Management