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 **Research & Development** June 2018 - Present
INFICON *Syracuse, New York*

- Delivered updates and status reports to the Senior Director of Development for Intelligent Sensor Solutions (ISS).
- Disseminated statistical ML and signal processing research at the internal global data science research summit.
- Applied data science expertise to mass spectrometry sensors and systems as a part of INFICON's ISS R&D group.
- Lead and planned data science initiatives in a cross-functional environment — completing 10 studies and projects.
- Collaborated with stakeholders to elucidate tangible research objectives from high-level problem statements.
- Conducted basic research documenting baseline predictive models — supporting subsequent product development.
- Counseled internal R&D teams, e.g., facilitated literature searches, discussed approaches, and partook in reviews.
- 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.
- Communicated advised manufacturing process improvements to stakeholders — addressing 70% of sensor records.
- Devised A/B ML model tests for mass spectrometry sensors — quantifying 33% variation among previous models.
- Modeled and improved mass spectrometry sensor performance and signal quality with a 21% reduction in error.

PRESENTATIONS

Data Science for the Modular 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 *February 2021 - May 2021*
Postgraduate ◇ Mathematics

Syracuse University *August 2017 - May 2018*
Master of Science ◇ Computer Science

Syracuse University *August 2014 - May 2017*
Bachelor of Science ◇ Computer Science 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