

# 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

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

<b>Engineer</b> <i>INFICON</i>	<b>Research &amp; Development</b>	June 2018 - Present <i>Syracuse, New York</i>
<ul style="list-style-type: none"><li>· Delivered updates and status reports to the Senior Director of Development for Intelligent Sensor Solutions (ISS).</li><li>· Disseminated statistical ML and signal processing research at the internal global data science research conference.</li><li>· Applied data science expertise to mass spectrometry sensors and systems as a part of INFICON's ISS R&amp;D group.</li><li>· Lead and planned data science initiatives in a cross-functional environment — completing 10 studies and projects.</li><li>· Collaborated with stakeholders to elucidate tangible research objectives from high-level problem statements.</li><li>· Conducted basic research documenting baseline predictive models — supporting subsequent product development.</li><li>· Counseled internal R&amp;D teams, e.g., facilitated literature searches, discussed approaches, and partook in reviews.</li><li>· Coordinated with physical scientists to integrate domain expertise into the experiments and predictive models.</li><li>· Interfaced with software engineers to facilitate migrating algorithmic research and findings to existing technologies.</li><li>· Audited sensor performance via simulation studies — covering 58% of chemical detection and gas analysis sensors.</li><li>· Communicated advised manufacturing process improvements to stakeholders — addressing 70% of sensor records.</li><li>· Devised A/B ML model tests for mass spectrometry sensors — quantifying 33% variation among previous models.</li><li>· Modeled and improved mass spectrometry sensor performance and signal quality with a 21% reduction in error.</li></ul>		

## PRESENTATIONS

<b>Data Science for the Modular Mass Spectrometer</b> <i>INFICON Data Analytics Summit</i>	November 2020
<b>Get Started with Machine Learning and AI Today!</b> <i>INFICON Data Analytics Summit</i>	November 2020
<b>Approaches to Automatic Text Summarization</b> <i>Syracuse University iSchool Poster Session</i>	April 2018

## EDUCATION

<b>Syracuse University</b> Postgraduate ◊ Mathematics	<i>February 2021 - May 2021</i>
<b>Syracuse University</b> Master of Science ◊ Computer Science	<i>August 2017 - May 2018</i>
<b>Syracuse University</b> Bachelor of Science ◊ Computer Science	<i>August 2014 - May 2017</i> Summa Cum Laude

## SKILLS & COMPETENCIES

<b>Programming Languages</b>	Python, MATLAB, R, SQL, C++
<b>Certificates</b>	Linux Kernel Internals and Development (LFD420)
<b>Software &amp; Tools</b>	PyTorch, Scikit-learn, Statsmodels, Pandas, SciPy, NumPy, Matplotlib, Linux, Git
<b>Competency Areas</b>	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
<b>Soft Skills</b>	Communication, Teamwork, Decision Making, Project Planning, Time Management