Data Scientist

Employees can work remotely

Full-time

Company Description

INFICON is a leading provider of innovative instrumentation, critical sensor technologies, and Smart Manufacturing/Industry 4.0 software solutions that enhance productivity and quality of tools, processes, and complete factories. These analysis, measurement and control products are essential for gas leak detection in air conditioning/refrigeration and automotive manufacturing. They are vital to equipment manufacturers and end-users in the complex fabrication of semiconductors and thin film coatings for optics, flat panel displays, solar cells and industrial vacuum coating applications. Other users of our vacuum-based processes include the life sciences, research, aerospace, packaging, heat treatment, laser cutting and many other industrial processes. We also leverage our expertise in vacuum technology to provide unique, toxic chemical analysis products for emergency response, security, and environmental health and safety.

Job Description

Our company offers an industry-leading suite of Industrial Engineering software used by semiconductor manufacturers around the planet. To effectively monitor and control such environments, it is necessary to effectively model and analyze the data.

The complexity of modern semiconductor manufacturing offers a rich landscape of valuable opportunities and worthwhile problems to solve. We are looking for a candidate with a demonstrated track record of building, training, validating, and deploying inference models - including comprehending the time dependent aspects of the data.

This position offers a great opportunity to apply modern analysis and machine learning (ML) methods to range of challenging problems. Our company

encourages publishing and presenting the results at scientific conferences and symposia.

Candidates with experience in semiconductor manufacturing, industrial engineering, operations research, and Oracle SQL/PLSQL are strongly preferred.

Qualifications

Required qualifications:

· Bachelor's in Industrial Engineering, Physics, Mathematics, or similar quantitative field

· 2+ years of data science experience (building, training, validating, and deploying ML models)

· Knowledge of Python, PyTorch, scikit-learn, numpy, pandas, scipy, or similar data science libraries in the Python ecosystem

· Experience performing exploratory data analysis (working knowledge of data analysis, visualization, and statistics applied in a real-life environment)

· Familiarity with time series modeling methods (ARIMA / SARIMAX, Recurrent Neural Networks)

· Familiarity with sequence modeling/analysis (Markov chains, Hidden Markov Models, Kalman filtering, transformers)

Preferred qualifications:

· Master's degree with analytical focus (e.g. Machine Learning, Applied Mathematics, Statistics, etc.)

· 3+ years experience in Semiconductor Manufacturing, ideally in Industrial Engineering or Operations Research areas

· Experience applying time series analysis and sequence modeling in operational environment

· Experience using Machine Learning methods to outperform statistical baselines

· Experience writing production-level code, especially in Python

· Deep knowledge of Oracle SQL & PL/SQL

Additional Information

For New York, the expected salary range for this position is between **$90,000 and $140,000 per year.** *In addition, INFICON employees are eligible for a profit sharing bonus with a target of 10%.* The actual compensation will be determined based on experience, location, and other factors permitted by law.

INFICON provides a dynamic work environment that promotes diversity, equity, and inclusion. Our employees experience ongoing green initiatives, flexible work hours, and a variety of health and wellness programs.

INFICON's forward-thinking approach offers countless opportunities to design, support, and manufacture a diverse product portfolio that expands globally. Our Lean and Agile work environment offers competitive compensation, relocation assistance, a discretionary bonus, and generous employee benefits; major medical, dental, health, vision, 401K, vacation and sick time, tuition reimbursement, and more!

INFICON is committed to ensuring that our online application process provides an equal opportunity to all job seekers that apply without regard to race, religion, ethnicity, national origin, citizenship, gender, age, protected veteran status, disability status, genetic information, sexual orientation, or any other protected characteristic. A notice describing Federal equal employment opportunity laws is available here and here to reaffirm this commitment.

INFICON, Inc. strictly complies with all aspects of the Export Administration Regulations ('EAR'), including those sections dealing with deemed exports to foreign nationals.