

## Senior Optical Engineer

Savormetrics Inc.

### POSITION OVERVIEW:

The Senior Optical Engineer will report to the Chief Technology Officer and work closely with the Director, Product Development. The Engineer will contribute to the development of free space optical elements used in our spectroscopy and imaging based sensing systems. Savormetrics Inc. is an industry leader in rapid testing technology and shelf life extension of produce. Our sensing devices are optical based and are used to detect characteristics in food as well as the presence of pathogens, contaminants, and other small molecules. Our unique optical designs make our devices easy to use while providing advanced data for customer specific needs supporting them in making effective decisions.

The successful individual will immediately contribute by designing optical sensors based on free space optical elements. The sensors will be designed with considerations for manufacturability. They will also be responsible for working closely with Director, Product Development to make sure the designed optical elements work well in a product. Involvement in the design and development of any future technologies with a focus on the design, build, test, implementation, and maintenance of optical technologies is strongly encouraged. The selected individual will work closely with our customers to make sure that the designs incorporate the usability needs for seamless adoption.

This position may require some local and international travel.

### ACCOUNTABILITIES:

Under the general direction of the CTO, the Senior Optical Engineer is responsible to:

- Take a leading role in free space and integrated optics system designs,
- Develop spectroscopy based tools and lab setups for technology validation,
- Conduct experiments with food and help develop understanding of spectroscopic features to bio-chemical and bio-physical parameters,
- Work with users to development system of requirements,
- Propose, design and test optical sensors for detection of bio-chemical and bio-physical parameters of food.
- Understand overall customer product requirements and how they relate to optical design,
- Ensure appropriate optical platforms are used to complement the software for optimal performance, meeting customer requirements,
- Learn customer requirements and rapidly build advanced domain knowledge of the food sector,
- Design, execute and report on commercial testing,
- Provide support in development and participation in workshops, conferences and other events, working with internal and external stakeholders,
- Second line support for customer issues,
- Effectively communicate with all members of the team,
- Fulfil additional work-related duties as required / assigned,
- Demonstrate commitment to professional development,
- Promote the core values of Savormetrics.

## **POSITION REQUIREMENTS:**

### **Education and Experience:**

- Doctorate Degree in Electrical Engineering, Physics or technical equivalent with a background in optics, or a Masters Degree with significant commercial/industry experience;
- At minimum 5 years of hands-on experience in free-space and integrated optical systems design;
- Experience with software / hardware interfacing would be an asset;

### **Competencies:**

- Demonstrate entrepreneurial aptitude,
- Capable of quickly learning unfamiliar optical systems concepts,
- Ability to adapt and perform in a fast-paced and fluid environment of a start-up,
- Possess technical aptitude and analytical abilities,
- Excellent leadership and interpersonal skills,
- Highly professional communicator, oral and written,
- Ability to multi task effectively,
- Eager to learn and contribute in a team setting.

### **Technical Knowledge:**

- Strong understanding and extensive experience with one of Zeemax, Code V or equivalent software,
- Strong understanding and extensive experience with Matlab;
- Strong experience with setting up lab setups using free space optical setups;
- Strong experience and understanding of spectroscopy
- Understanding of integrated optical system designs;
- Experience with Microfabrication processes will be an asset.

### **Personal Attributes:**

- Initiative and independence – the ability to take appropriate action and anticipate team needs,
- Objectivity, integrity – the ability to seek and weigh opinions and evidence – compromising where necessary on ways and means but not on principles or goals,
- Professionalism – operate at the highest level of professionalism with colleagues, clients and all other stakeholders,
- Problem solving - ability to see multiple ways of tackling a problem and think “outside of the box”,
- Diplomacy and tact – the ability to deal effectively with colleagues and stakeholders,
- Leadership potential – capacity and aptitude for leading a team, taking charge and motivating team members,
- High energy –capacity to work effectively in a rapid pace, tight deadline ad hoc work environment,
- Team-player – is flexible and enjoys working in a team environment,
- Positive attitude,
- Result driven,
- Deadline driven,
- Entrepreneurial spirit.

Applications will be accepted until position is filled Please note, only suitable candidates will be contacted. Please submit your resume and cover letter to: [careers@Savormetrics.com](mailto:careers@Savormetrics.com)