RDI Technologies combines computer vision and digital signal processing to bring new technology to the industrial maintenance and asset reliability markets. We are excited to bring game changing technology to this well-established market, and we need to bring new talent to our development team.

Job Title: Computer Vision Engineer

Job Overview:

As a member of our development team, you will contribute to the development of existing RDI products by improving the computer vision technology currently in use, developing new computer vision techniques, and applying this technology to other problem domains in which our customers have expressed interest.

We are looking for a computer vision specialist to help us refine and develop algorithms to support the evaluation of the health of industrial assets. You will be working closely with the software development team to incorporate new concepts and algorithms within the framework of the current system and new systems currently in development.

Responsibilities and Duties:

o Research and develop computer vision and machine learning algorithms and applications
o Develop proof-of-concept implementations and prototypes with the goal of implementation in practical, state-of-the-art systems.
o Design and perform experiments to evaluate the effectiveness of the algorithms that are developed
o Design and perform experiments to quantify and validate improvements made to existing systems
o Work with other development engineers to implement algorithms developed during research efforts into the production software
o Apply libraries including OpenCV, PyTorch, and TensorFlow
o Create automated software tests and provide support to troubleshoot software issues when needed
o Document algorithms that are developed

Required Skills and Experience:

o Bachelors degree or Masters degree in computer vision, machine learning, artificial intelligence, or related field
o Demonstrated track record in defining and leading research in advanced 3D computer vision and deep learning, including tracking, object understanding, scene reconstruction, representation learning, or related areas
o Proficient in: C, C++, Python, or MATLAB
o Experience with Linux, Windows
o Self-motivated, results driven, customer focused

- o Ability to estimate effort required to implement identified tasks
- o Excellent written and verbal communication skills
- o Ability to grasp new concepts quickly
- o 3+ years of experience working in a modern software development environment, including: unit testing, source control, and continuous integration

Preferred Skills:

- o Understanding of the full machine vision pipeline from sensors to high-level algorithms
- o Experience in geometric computer vision, including tracking, 3D reconstruction, localization, object detection, and scene understanding

Position Details:

- o Full-Time
- o Competitive benefits including medical/dental/vision insurance and 401k

Why work at RDI Technologies:

- o RDI Technologies is experiencing a rapid expansion in our business both in the volume of sales and the breadth of product offerings. This will allow career growth opportunities as technical leadership will be required to support the broader offering of products.
- o At RDI all of the decisions are made locally in the Knoxville, TN headquarters. Working in the Knoxville office will provide access to the leaders and allow you to contribute to the decisions that are made.
- o Our company is applying new computer vision technology to various markets. This provides constant opportunities to learn and grow as an engineer. This learning involves both new technologies and new problem domains, such that solutions can be designed and developed to leverage new technology to solve existing problems in new ways.
- o RDI drives product development from a technical direction. So the development team has significant input into the products that are put into the hands of our customers. Developers are encouraged to interact with customers before and after product launch to better understand customer needs and gain insight into how to improve the product.

About RDI Technologies:

RDI Technologies is pioneering the camera as the sensor of the future because visualization is faster, safer, and makes the complex simpler. The company's proprietary technology platform powered by Motion Amplification® enables users to see and measure motion that is impossible to see with the human eye and could previously only be measured by contacting sensors. RDI's products combine the power of modern cameras with software to turn what used to be complex charts and graphs into easy-to-understand video data that enables users to quickly and safely solve their toughest problems and communicate the results. RDI Technologies has been included in the annual Inc. 5000 list three years in a row. The Inc. 5000 list includes the nation's fastest-growing private companies.

To Apply:
Email resume to mark.slemp@rditechnologies.com