

Internship Description 1

Job Title: Handheld Laser Welding with Cobot Integration Intern

Company: JD Union Pte. Ltd.

Location: 8 Boon Lay Way, #07-06, Singapore 609964

About Us:

JD Union Pte. Ltd. is a leading distributor of photonic products in the laser material processing industry. We work with major suppliers in research and development to craft tailor-made lasers for unique use cases and test them in our own application lab. For over 12 years, we have provided one-stop solutions for system integrators, serving both multinational corporations and small and medium enterprises with fast service, professional repairs, and long-term commitment.

Job Description:

We are seeking a highly motivated and detail-oriented intern to join our team in **integrating handheld laser welding with collaborative robots (Cobots) to control and optimize laser processes**. This internship offers hands-on experience in automation, robotics, and control systems, giving you the opportunity to work closely with engineers and researchers on top-tier laser and robotic products.

Job Responsibilities:

- Assist team members in the integration of handheld laser welding equipment with collaborative robots (Cobots).
- Develop and optimize control algorithms for welding operations, and demonstrate improvements in quality, speed, and efficiency on stainless steel, aluminum, and copper using Cobots.
- Document research findings and present results to team members and customers.
- Participate in team meetings, tradeshow, and contribute to brainstorming innovative solutions.

Requirements:

- Currently pursuing a Bachelor's degree in Mechatronics, Robotics, Computer Science, Electrical Engineering, Computer Engineering, Mechanical Engineering, or a related field.
- Knowledge of programming languages such as C#, C++, or others.
- Interest in laser welding technologies, with an understanding of robotics, control systems, and automation processes being a plus.
- Strong communication skills, hands-on abilities, and teamwork capabilities.

How to Apply:

In addition to submitting through the school portal, interested candidates are encouraged to send their resume, cover letter, and transcript directly to **info@jd-union.com** with the subject line: *"Handheld Laser Welding with Cobot Integration Intern Application - [Your Name]"*.

JD Union is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees.

Internship Description 2

Job Title: Motion & Vision Control for Laser Micro-Processing Intern

Company: JD Union Pte. Ltd.

Location: 8 Boon Lay Way, #07-06, Singapore 609964

About us:

JD Union Pte. Ltd. is a leading distributor of photonic products in laser material processing industry. We work with major suppliers in research and development to craft tailor-made lasers for unique use case and test in own application lab. For over 10 years, we have been providing one-stop solutions for system integrators. We serve both multinational corporations and small and medium enterprises with fast service, professional repair and long-term commitment.

Job Description:

As a Motion and Vision Control Intern, you will have the opportunity to apply the theory you've learned in university and work on real-world projects involving the development and implementation of motion & vision control algorithms. You will collaborate with experienced engineers and researchers to enhance the performance and capabilities of our laser micro-processing systems. If you are pursuing computing, engineering, physics or related degree and you are good in programming, electronics or photonics, you are the right candidate for this role!

Job scope:

- Collaborate with team members to source and integrate motion and vision control components under current commercial software system
- Develop and test vision processing algorithms for laser automation process
- Assist the design and implement motion control algorithms for laser control systems
- Conduct experiments and calibrate system, analyse data to evaluate laser control system performance
- Participate in team meetings, tradeshows and contribute to the brainstorming of innovative solutions
- Document research findings and present results to the team member and customers

Requirements:

- Currently pursuing a Bachelor's degree in Mechatronics, Robotics, Computer Science, Electrical Engineering, Computer Engineering, Mechanical Engineering, or related field
- Understanding of motion control and vision processing concepts
- Proficiency in programming languages such as C#, C++ or others
- Experience with hardware components such as lasers, galvanometer scanners, and multi-axis stages is a plus
- Excellent problem-solving skills and attention to detail
- Strong communication, hands-on and teamwork abilities

How to apply:

Besides submitting through the school portal, interested candidates are encouraged to submit their resume, cover letter and transcript directly to info@jd-union.com with the subject line " Motion and Vision Control Intern Application - [Your Name]".

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