

Position: Electronic Systems Designer
Location: Kitchener, Ontario
Experience: College diploma or university degree in a related field, 1-3yrs experience

About Us

Clearpath Robotics Inc. specializes in the design and manufacture of unmanned vehicle systems, software, and components for academic, industrial and military research and development. Our clients range from small local businesses to some of the best known technical institutions on the planet. Based in Kitchener-Waterloo, Clearpath Robotics employs highly talented people who live and breathe robotics. We believe that work must have a high “cool” factor, and we’re looking for people who share in our passion to create remarkable products and change the world.

About the Job

Yup, we’re hiring... again! We are shipping more and more robots and taking on exciting contract work at the same time. We need an Electronic Systems Designer to help us take our designs from napkin sketches to hundreds of pounds of precisely moving parts.

You will be responsible for significant portions of the electrical design for our new and existing products. This will range from high-level system architecture to board layout and field testing. Our hardware must be many things, but reliable most of all. It will be your job to build systems that can operate in whatever environment we subject them to, all while keeping the motors turning for our mechanical team and the 1’s and 0’s flowing properly for our software developers.

Your primary responsibilities will be:

- PCBA design (from initial specs to board layout)
- Cable assembly design & implementation
- Integration and testing of prototypes into fearsome robots
- Developing assembly and test procedures

Additional tasks may include:

- Care, feeding, and testing of new products
- User interface and enclosure design
- Evaluation of new sensor/actuator technologies
- Mentoring and assisting with supervision of interns, co-op students, and temporary labour

About You

You want to work for a small company that thinks big and dreams huge. You are driven, view work as more than just a job, and are never satisfied with a project left half-done. You want to be surrounded by people like you; creative, fun-loving, and passionate about their work. You are motivated by making an impact on your workplace and you thrive on challenging and rewarding problems. Oh, and you have some form of higher education with the common sense to back it up.

Required Technical Skills:

- Digital/Analog circuit design (2+ yrs)
- PCB layout (1+ yrs)

Desired Soft Skills:

- Analytical problem solving skills
- Creative and unconventional problem-solving skills in the event that the above skill set fails
- Organizational and planning skills
- Comfort with abrupt changes to project deadlines, job responsibilities and the local gravity field

Bonus points for:

- Familiarity with Atmel, Microchip, and TI microcontrollers
- FPGA experience
- Comfort with Altium Designer
- Experience with Ethernet and CAN standards
- Brushed/brushless motor controller experience
- Experience in designing environmentally hardened systems
- MarioKart prowess

What Now?

Please send your resume as well as testimonials, references, writing samples, or other indications of exceptional past experience to resourcefulhumans@clearpathrobotics.com, including “Electronic Systems Designer” in the subject. Candidates with past experience or training will be strongly prioritized. If your skills don’t fit this job description, but you’re still interested in working with us please apply to our “General Robotics Enthusiast” position. **No recruiters or form cover letters, please.**