

Computer Vision Project Manager

Centre de robotique et de vision industrielles Inc. – CRVI
205 rue Monseigneur-Bourget, Lévis, QC

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Working in a network environment, the **computer vision project manager** will participate in CRVI's research program and in the development of next-generation vision and industrial robotics systems for clients in various industries. Specifically, the incumbent will be responsible for designing and building optical systems. The project manager will have experience and state-of-the-art knowledge in the field of 2D and 3D computer vision, as well as advanced software development, data analysis, and lab skills.

Centre de robotique et de vision industrielles Inc. (CRVI) is a college technology transfer center located at Cégep de Lévis-Lauzon. CRVI has been an integral part of Quebec's innovation system since 1984. We help companies looking to leverage innovation and be more productive and competitive by offering our expertise in applied research, technology transfer, and customized support in the fields of industrial robotics, computer vision, and artificial intelligence. CRVI is a key player in Quebec's efforts to implement advanced technologies and truly make the jump to Industry 4.0.

CRVI is backed by a multidisciplinary team of experts (doctors, engineers, technicians) and state-of-the-art research facilities complete with industrial equipment and cutting-edge laboratories. As a firm believer in the collaborative approach, CRVI is a member of the Synchronex network, QuébecInnov, and many other sector-based associations, thereby optimizing value and innovation potential for clients. CRVI's 2021–2026 research program is focused on advanced industrial robotics, leveraging the latest advances in artificial intelligence, cloud computing, and the Internet of things to train robots to perform more complex tasks requiring greater flexibility. CRVI seeks to establish a development framework to simplify and accelerate prototyping of a wide range of advanced robotics applications.

Primary duties:

Reporting to senior management, the computer vision project manager will perform the following duties:

- Design and characterize optical systems:
 - Select cameras and determine types of lighting, lenses, and wavelengths
 - Design and characterize 2D/3D data processing and vision algorithms
 - Design mounting assemblies and calibrate optical systems
- Develop vision system software in C/C++ and embedded platforms
- Conduct performance tests on actual systems
- Write technical documentation
- Coordinate the work of project team members to achieve objectives
- Support computer vision business development opportunities
- Work with the software architecture expert to design and develop the architecture of CRVI's advanced industrial robotics application prototyping platform

Desired skills:

- Bachelor's degree (or higher) in a relevant field

- Experience or skills in one of the following areas: pattern recognition, image processing, 3D vision, artificial intelligence
- Extensive programming experience
- C++ object-oriented programming experience
- Working knowledge of one of these vision libraries: OpenCV, Cognex, Matrox, or Halcon
- Matlab or Python prototype development experience
- Professional, driven, and team-oriented

Assets:

- Code profiling and optimization experience
- GP-GPU programming experience
- Knowledge of optics and sensors
- Embedded systems development experience
- Full-stack development knowledge (*desired*)

Working conditions:

- Wide variety of challenging projects
- Competitive salary and benefits
- Group insurance and retirement savings plan
- Flexible working hours (37.5 hours) and possibility of telecommuting
- Gym, pool, and weight room on site
- Free parking and coffee
- Great location for families with cultural, sports, and social activities

CRVI cares about its employees and is committed to developing their skills.

Are you interested in this position, but lack the required skills? Send us your application anyway.