

Cognex Corporation

Job Summary:

Position is as an Optical Engineer in the ID Products Group. The ID Products group is responsible for the development of camera devices that can read barcodes and 2D codes with vision technology. Sometimes those codes are marked directly onto the surface of industrial products, in which case special optics or illumination may be required to read them. In some applications the readers are mounted in a fixed position, other applications require the use of a handheld reader. The Mechanical Engineering Team is responsible for the optical- and mechanical design of readers for this variety of applications. This includes the following:

Essential Functions:

- Convert application requirements (field of view, working distance, resolution) into optical requirements (focal length, pixel size, sensor size, illumination intensity..)
- Design of illumination and imaging optics, mounts and the integration of illumination, imager optics and electronics into code readers.
- The creation of drawings and specifications for the optical- and mechanical parts.
- The documentation of these designs, such as assembly- and test procedures.
- Discussions with contract manufacturers and suppliers concerning the manufacturability of optical parts and –assemblies. Assist with- or perform tests to check if the design meets specifications

Knowledge, Skills, and Abilities:

- Experience with Zemax and 3D-CAD software, preferably SolidWorks.
- Knowledge of: lenses and mirrors, LEDs, visible diode lasers, CMOS sensors, optical filters & -coatings.
- Must be able to make quick sketches and first order calculations of optical systems.
- Creative, innovative. Must be able to design optics for high performance products that can be produced cost-effectively and in large quantities.

Minimum education and work experience required:

- University degree in optical engineering
- Two or more years experience with optical design.

Disclaimer:

The above statements are intended to describe the general nature and level of work being performed by people assigned to this classification. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

Contact details:

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