

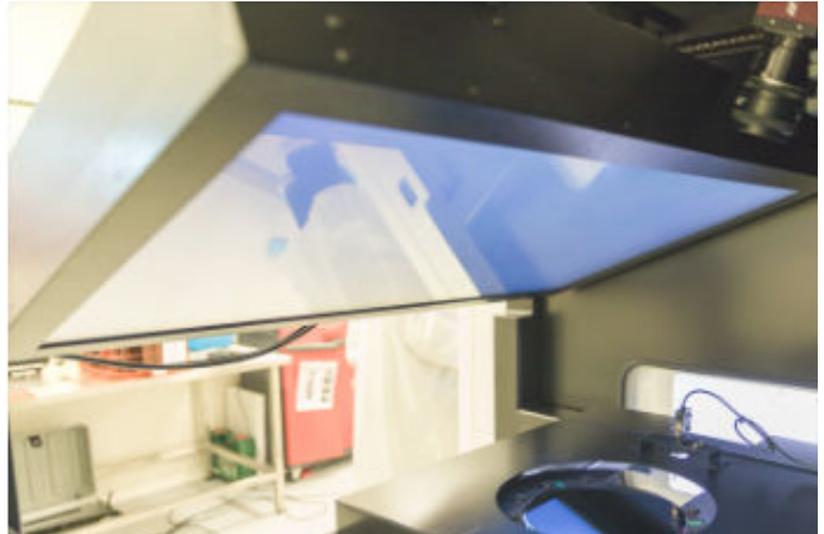
Internship in Computer Vision

Development and assessment of a stereoscopic deflectometry solution using several calibrated cameras, real or virtual, to reconstruct the topography of a wafer

Unity designs and develop high precision tools to optically control the processes for the semiconductor industry. For this application, Unity has developed a deflectometry system.

This system is based on the measurement of light beams deviation to extract data linked to the wafer topography and its 3D shape. It is composed of a calibrated camera imaging a high definition screen reflected by the wafer considered as an imperfect mirror.

However, using a unique camera allows to extract only an indirect information on the wafer topography: normal vectors to the surface at each pixel of the camera. To further improve our system, it is possible to use a second camera



You will be part of the R&D team and will have as objectives to:

- Study different configurations to set up a stereoscopic deflectometry system adding a second real or virtual camera.
- Implement the topography reconstruction methods adapted to the multiple view data.
- Rigorously assess the performance of the system on reference samples.

You are enthusiastic regarding computer vision and technology in general. You are at ease with MATLAB. Eager to work on new high-tech tools, you appreciate to understand how it works and how to push forward its performances.

You want to address a research and development project. You communicate easily with the other members of the team and want to evolve in a dynamic environment.

Duration: 6 months.

Please send a resume and a cover letter to: careers@unity-sc.com