# Graduate Projects Computer Vision





## Let's siqure your world







At Siqura, we build intelligent video solutions for industrial applications.

#### **Applications**

- Off-shore & Maritime
- Oil & Gas
- Critical Areas
- Traffic & Mobility
- Situational Awareness

#### Techniques

- Embedded Computer Vision
- Sensor Fusion
- Deep Learning
- Thermal Cameras
- 3D Processing

If these techniques and applications fit your interests, feel free to send us an e-mail to discuss traineeship opportunities and computer vision projects.

Send your CV and motivation letter to Anne Vossen (<u>avossen@siqura.com</u>) and Julien Vijverberg (<u>jvijverberg@siqura.com</u>) or find us at <u>www.siqura.com</u>



## Example Projects Computer Vision

### Embedded implementation Region Segmentation for Vessel Detection

Implement recent region segmentation algorithms onto an FPGA or DSP in our embedded camera platform.

#### Sensor Fusion for Vessel Detection

Combine microphones, thermal cameras, visible-light cameras and other sensors to detect approaching vessels to protect off-shore infrastructure.

#### Camera Localization

Make a camera localization and calibration method for our cameras applicable to our application areas which is easy to use by the installer.

# Camera Stabilization by Fusion for Ship-Mounted Cameras

Implement a digital stabilization algorithm using multiple cameras and other sensors suitable for maritime scenarios.

# Deep Learning for Multi-Sensor Detection Systems

Investigate how to apply deep learning principles to a multi-sensor detection system.

### On-line Learning Texture Classification

Implement an on-line learning algorithm to teach our cameras how to classify textures.



Extended project descriptions are available at <a href="http://siqura.com/about-contact/employment">http://siqura.com/about-contact/employment</a>

