



PhD POSITION
in
**High-resolution smart imaging systems for automotive and
semiconductor applications**

Delft Center of Systems and Control, Delft University of Technology, The Netherlands

Do you want to be a part of a rapidly growing Control of Scientific Instruments (CSI) lab? This year the CSI Lab was awarded participation in the EU ECSEL (Electronic Components and Systems for European Leadership) project MADEin4. The CSI lab will be involved in the large consortium of over 40 partners to develop new, beyond state-of-the-art solutions for industrial challenges in the fields of Machine Learning, Sensor Fusion, and Computational Optics. These tools should enable European industry to realize the next industrial revolution "Industry 4.0". Industry 4.0 embraces a number of new technologies developed in order to increase the productivity and predictability of industrial processes, such as smart use of data, sensors, and control algorithms. On-line image-based quality control poses several challenges, including environmental conditions, contradicting requirements on the image quality and cycle time, on the image resolution and available data bandwidths, on the defect sizes and the inspected area.

If you like to develop new, beyond state-of-the-art solutions for industrial challenges, if you want to invent new algorithms in the fields of Machine Learning, Sensor Fusion, and Computational Optics, and not scared to try them out on a hardware platform, than a PhD in smart machine vision is what you are looking for.

Applicants should have the following qualifications:

- Master degree or equivalent degree preferably in physics, computer science or control;
- Able to gather and analyse data effectively from different resources to build an eloquent, comprehensible and convincing story;
- Able to manage his/her time;
- Wide-ranging interdisciplinary interests and skills:
- Focused and organized;
- Strong interpersonal and communication skills;
- Curiosity;
- Demonstrated ability to apply creativity and out-of-the-box thinking to produce innovative concepts and solutions.

Conditions of employment

The TU Delft offers a customisable compensation package, a discount for health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged. An International Children's Centre offers childcare and an international primary school. Dual Career Services offers support to accompanying partners. Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities.

As a PhD candidate you will be enrolled in the TU Delft Graduate School. The TU Delft Graduate School provides an inspiring research environment; an excellent team of supervisors, academic staff and a mentor; and a Doctoral Education Programme aimed at developing your transferable, discipline-related and research skills. Please visit graduateschool.tudelft.nl/ for more information.

In accordance with the equal opportunity policy of Delft University of Technology female candidates are in particular invited to apply.

Faculty: Mechanical, Maritime and Materials Engineering (3mE)
Department: Delft Center for Systems and Control (DCSC)
Level: University Graduate
Working hours: 38 hours per week
Contract: Temporary, four years
Salary: € 2325 - € 2972 per month gross

Information and application

For more information about this position, please contact Dr. Oleg Soloviev, Senior research fellow, via e-mail: o.soloviev@tudelft.nl. Applications shall be emailed to: application-3mE@tudelft.nl. When applying for this position, please refer to vacancy number 3mE19-55.

An application dossier consists of the following documents:

- detailed curriculum vitae and list of publications;
- a brief statement of motivation and research interests (up to 1 page);
- academic transcripts of all the exams taken and all the obtained degrees (in English);
- names and contact information of up to three references (e.g., project/thesis supervisors);
- up to three research-oriented documents (e.g., thesis, conference/journal publications).

The starting date is as soon as possible.

The call for applications will remain open until the ideal candidate is found. However, for full consideration please apply by September 1, 2019.