



Department of Informatics
Computer Vision Group
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<http://vision.in.tum.de>



In cooperation with the
Mechanical Engineering Department
<http://www.utg.mw.tum.de>

Interdisciplinary Project (IDP), Guided Research Project or Thesis in WS 2014 / 2015

Project: Image based analysis of shear zones in metal components

Project description

- development of an automatic image / video analysis algorithm for determining the evolution of shear zones in metal components
- adapt the test set-up to your requirements and take pictures of the development of the sample over time
- analyze the pictures by using methods of variational image processing, in particular variational image and video segmentation
- determine the change of the sample over time using methods of mathematical analysis

Requirements

- knowledge of mathematical analysis
- knowledge of computer vision in particular variational methods
- interest to combine programming with a practical application and practical experiments

Contact us

You are interested in this research project? Please send your application together with your curriculum vitae and transcripts of records to julia.diebold@in.tum.de.

General information

The *Guided Research* module is worth 10 ECTS. It is recommended that you check with your advisor to learn which courses will best prepare you for your research.

The *IDP* is worth 16 credits, earned through lectures (min. 5 ECTS, no lab courses or seminars), practical work (max. 8 ECTS), documentation (min. 2 ECTS), and presentation (min. 1 ECTS).

The *master's thesis* is worth 30 ECTS and involves focused research on a specific topic for six months.