



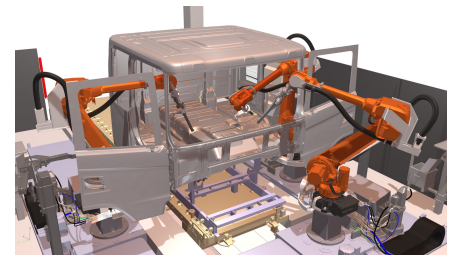
FRAUNHOFER CHALMERS
RESEARCH CENTRE FOR INDUSTRIAL MATHEMATICS

Earn Money with Mathematics

Fraunhofer-Chalmers Research Centre for Industrial Mathematics, FCC, are happy to invite a number of selected Chalmers and University of Gothenburg master students to our annual Earn Money with Mathematics lunch seminar.

FCC is offering contract research, services, algorithms and software based on advanced mathematics within Modeling, Simulation and Optimization (MSO). MSO provides a significant leading edge in industrial innovation and we have been able to help over 200 customers to improve their products and processes since the start in 2001. We are continuously looking for talented students for our activities including master thesis projects, bachelor student projects, and hiring of undergraduate and graduate students on part-time basis to participate in projects at our three departments:

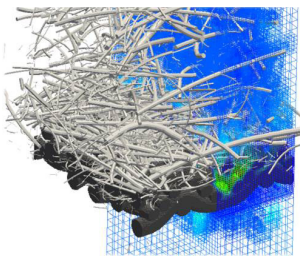
Geometry and Motion Planning does math based algorithms and software for virtual product realization. Main technologies and areas are motion planning for manikins, simulation of flexibles, collision free path planning and discrete optimization of multi robot stations, and computer graphics.



Robot path planning, optimization and simulation of sealing laydown in cooperation with Scania.



Optimization of Cable Harness Routing
Tobias Karlsson, MSc (MPENM)



Computational Engineering and Design focuses on algorithms and software for virtual product and process development within the automotive, paper and pulp and electronics industries. Applications include fluid dynamics, structural mechanics and electromagnetics.

Fluid-structure interaction simulation of paper production (courtesy of Albany International)

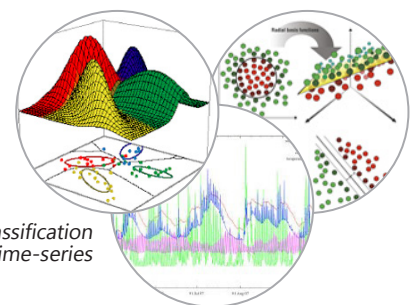


Simulation of Railroad Interaction Between Sleepers and Ground (Master thesis)
Anita Ullrich (GUCAS)

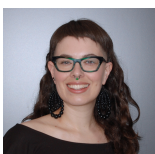


Simulation of glue and other sticky materials
Simon Ingelsten, MSc (MPENM)

Systems and Data Analysis does projects in dynamical systems modeling; systems biology and electrophysiology; machine learning, industrial statistics, and big data analytics with pharmaceutical, engineering and automotive industries.



Low-dimensional visualization of clustering and classification of high-dimensional spatiotemporal data, e.g., time-series of acoustic spectra or automotive sensor data.



Predicting Antibiotic Resistance from Incomplete Data
Anna Johnning, PhD (Sahlgrenska Academy)



Machine Learning for Finding Galaxies
Henrik Håkansson, MSc (MPENM)

The meeting will be organized as a lunch seminar on Wednesday, **10 November**, between 12:00 and 13:00 in Chalmers Science Park, Sven Hultins gata 9, room Poseidon. We will serve baguettes and soft drinks at the meeting.

Please let us know by **3 November** at the latest if you wish to attend, by following the QR code or at fcc.chalmers.se/student-lunch-seminar-2021

