

Internship:

Company: Robert Bosch Produkte N.V., Tienen, Belgium

Department: EAB4, advanced development / calculation / simulation wiper blade

Description of the company: the name Robert Bosch stands world-wide for innovation and quality. With about 195.000 associates we are represented in more than 140 countries world-wide. In our location in Tienen/Belgium we develop and manufacture Bosch wiper systems. Tienen/Belgium is the biggest wiper production site world-wide (> 300.000 / day).

Subject of the internship: Continuous wiping simulation

Duration: 6 months

Start Date: as soon as possible

Allowance: 700 Euro/month

Tasks:

- Implementation (Matlab) of an automatic procedure for the determination of a "continuous" contact pressure distribution between a wiper blade and a given surface (windscreen):
 - Automatically extract geometry data from wiper-system/windscreen cinematic model (CATIA) and import into Matlab.
 - Automatically extract arm force data from an exiting cinematic model and import into Matlab.
 - Modify an existing Matlab algorithm to allow the use of the new input data for a "continuous" calculation of contact pressures.
 - Calculate the rubber profile characteristics with an existing Abaqus model.
 - Compare Matlab model results to those of an existing 3D Abaqus model.

Required skills:

- Last year Master degree mechanical engineering / Mathematics or comparable
- Analytical skills / Good knowledge of Matlab and FEM method. Basic knowledge of Abaqus preferred.
- Ability to work independently and good communication skills
- Proficient English (written and spoken), German is a plus.
- Applicant having a EU-country nationality

Contact:

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