

## Summer Jobs at NIRA Dynamics 2016

NIRA Dynamics AB develops innovative software-based functions to the vehicle industry. The current flagship is Tire Pressure Indicator (TPI), which is the market-leading indirect tire pressure monitoring system currently activated in more than 15 million vehicles worldwide. TPI uses signals already available in the vehicle, and based on this information detects if one or more tires are under-deflated. The computations are based on vehicle models and numerous advanced signal processing and sensor fusion algorithms. With TPI as a foundation, NIRA is developing further software products for the vehicle industry to enhance safety and to support autonomous driving.



We are looking for 2-3 talented and ambitious final year's students with specialization D, E, F, Y, Z or equivalent with a strong focus on signal processing & sensor fusion and/or programming that are interested in 8-10 weeks work during June to August 2016. We expect you to have excellent study results (average 4 or higher) and that you can take initiative and work independently.

The work cover various aspects related to our products, such as:

- *Tire Grip Estimation*: analysis of tire stiffness as a function of surface and temperature variations.
- *Tire Grip Estimation*: off-line performance evaluation tool.
- *Tool development (Matlab)*: development of tools for application planning: test plan generation, handling of tire/vehicle screenings, and so on.
- *Tool development (Matlab)*: development of automatic test tool: analysis and management of collected test data, visualization of product properties, module testing, etc.
- *Vehicle analysis*: vehicle load testing at standstill: analysis and development of tools for automatic mapping of load compensation algorithms.
- *Software development (C#)*: improvements of existing high-level software (GUI, etc.) in C#.
- *Software development*: improved connections between software tools in a web environment.
- *Build environment*: development of build and test systems in a python/C++/Jenkins environment.

Interested? Please send a personal letter written in English including a course listing with grades to [Peter.Lindskog@niradynamics.se](mailto:Peter.Lindskog@niradynamics.se) latest April 8, 2016. If possible, please indicate which of the work items on the list above you are interested in. Applications are reviewed when received.