Real time thermal model of braking system ECU

Brembo S.p.A is developing cutting edge technologies in the field of intelligent braking systems. Electronics control unit is one of the key components in these systems and its thermal behavior on critical vehicle mission profiles has to be investigated during the development phase and monitored in real vehicle application.

The scope of this project is to develop a thermal model to predict the ECU behavior during the virtual concept development phase of new braking system applications. A real time capable model is required to monitor the ECU hot spot in real vehicle application.

The model has to be validated with experimental data and integrated in different virtual development platforms such as model/software in the loop environments (MIL/SIL) and driving simulator (DIL) .

Requirements:

A strong background in modelling and analysis of systems dynamics, power electronics and thermal modeling.

Knowledge and experience within software such as Matlab ,Simulink, Phyton .

Typology : Internship + Master Thesis (6 Months)

Location: Stezzano (BG), Italy

Academic supervisor: prof. Radu Bojoi, email: radu.bojoi@polito.it

If you are interested please send your CV to recruiting@brembo.it