CAISR

A project in Research for Innovation
– the overarching strategic research programme of Halmstad University, supported by The Knowledge Foundation

Partners:
DaraLabs; Kollmorgen; NEAT Electronics; Optronic; Swedish Adrenaline; Tappa Service; Toyota Material Handling Europe; Volvo GTT;

Motivations and goals:
The KK-profile CAISR is set up to systematically build up and establish an internationally competitive research, education and innovation environment within applied intelligent systems.
CAISR shall contribute long-term to Halmstad University's strategic research and education development, and to the industry's development and competitiveness. It shall be sustainable, i.e. have a balance of education, research and innovation.
CAISR shall be known for high quality research, close cooperation with industry, and strong international networks and exchange. CAISR shall be attractive for students on all levels. Students from CAISR shall be attractive in the job market. CAISR shall build up the PhD education in Signals and Systems Engineering.
CAISR shall achieve a research volume of 25 MSEK/year, 20-25 Journal papers/year, equally many peer reviewed conference papers, and 2-3 PhD dissertations per year.
CAISR extends over the period 2012-2019.

Approach:
The research, education and innovation in CAISR builds upon three subject areas: Machine learning; Mechatronics (robotics); and Signal Analysis. These are focused around two application areas: Intelligent Vehicles and Health Technology.

The research questions are grouped and developed in the subject areas. The applied projects and the cooperation with the industrial partners are developed in the two application areas.

Current staff (heads):
3 full professors; one visiting professor; 5 senior lecturers; 5 assistant lecturers; 2 lecturers; 2 post-docs; 3 project coordinators; 14 PhD students.

Nine (9) of the staff (not counting PhD students) were recruited from international research environments abroad.

Results so far:
There were 15 Journal papers and 23 peer-reviewed conference papers published from CAISR staff 2012-2013. We expect an increase of 100% in the publication output for 2014.

We have grown the research volume from 15 MSEK to 20 MSEK. The funding from the KK foundation is about 33%. The internal funding from the University is about 30%. The Swedish Research Council (VR) contributes with 7%. Remining funds come from EU, Vinnova and industry cash contributions.

We today have 14 PhD students, of which three are industrial PhD students (employed in the industry). We have an active exchange of staff (both on PhD student level and younger researcher level) with industrial partners.

We have had two PhD dissertations and two licentiate examinations 2012-2014.

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