



Agenda – Anomaly Detection

Summary of the event

This UDRC theme meeting will address the challenges of anomaly detection.

An important capability of sensor based systems for monitoring, controlling, supporting human decision making, or even fully automatic operation is to detect anomalous situations, flagging an attention warranting event posing a threat or placing the operational system beyond the limits of its competence.

With the ever increasing level of intelligence and functional sophistication of sensor based systems, anomaly detection has also grown in complexity, taking into account contextual information and multimodal input to detect anomalous events. However, by and large, the conceptual basis of existing anomaly detection systems to date draws on the conventional formulation of anomaly detection as an outlier detection problem.

This meeting will explore recent advances in anomaly detection, which employ more complex mechanisms for anomaly detection. The meeting will also discuss anomaly detection applications as well as considering crucial open challenges in the field.

Location

Seminar Room (40bAB05)

The Centre for Vision, Speech and Signal Processing

University of Surrey, Guildford, GU2 7XH

Map can be found <http://www.surrey.ac.uk/cvssp/contact/>



Wednesday, May 28, 2014

9:00 am to 9:15 am	Coffee and Registration
9:15 am to 9:20 am	Introduction <i>Prof. Jonathon Chambers FREng, Director, LSSC Consortium</i>
9:20 am to 9:55 am	Challenges of anomaly detection <i>Josef Kittler, LSSC Consortium</i>
9:55 am to 10:35 am	Anomaly detection in battlespace scenarios – the challenges <i>Rachel Craddock, Thales Research</i> <i>Alasdair Hunter, Dstl</i>
10:35 am to 11:00 am	Coffee
11:00 am to 11:35 pm	Subtle anomaly detection in videos of people <i>Rolf Baxter, Edinburgh Consortium</i>
11:35 am to 12:10 pm	Finding anomalies in crowded scenes <i>Michael Leach, Edinburgh Consortium</i>
12:10 pm to 12:45 pm	Detecting anomalous activities in multimedia streams <i>Ioannis Kaloskampis, LSSC Consortium</i>
12:45 am to 1:45 pm	Lunch
1:45 pm to 2:20 pm	Selecting metrics and fusing beliefs for anomaly detection in communication networks <i>David Parish, Francisco Aparicio-Navarro and Konstantinos Kyriakopoulos, LSSC Consortium</i>
2:20 pm to 2:30 pm	Prize presentation to the winners of Dstl challenge set at the previous theme workshop
2:30 pm to 3:00 pm	Dstl present two current challenges
3:00 pm to 4:20 pm	Tea available and participants split into groups to discuss solutions to one of the two challenges
4:20 pm to 5:00 pm	Each group presents findings with open discussion
5:00 pm	Concluding remarks and close