

Position Statement for NSF-CDI Project 2013 Workshop in San Diego

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The recent explosion of social media offers a promising opportunity for knowledge discovery in cyberspace and big data. A natural area of knowledge discovery is that of inferring mood and mood shifts. In contrast, 60 years ago, the explosion of technological advances in conventional radars permitted knowledge discovery in inferring physical motion.

Validation is a critical and important aspect of such investigations but is typically hampered by an insufficient knowledge of the 'ground truth'.

This talk will (i) discuss qualitative structural differences between inferring physical versus mood dynamics and its implication in such research, (ii) review a new quantitative approach to charactering the mood of social media users, (iii) describe recent advances in this approach and most importantly (iii) make the case for validating this and related approach in a domain for which there is extensive ground truth – in the sport's domain.

Specifically, this talk presents a quantified analysis of 380,000 twitter messages related to the world's most popular soccer team, *Manchester United*, during its 2011-2012 season and objectively derived times of discontinuous mood shifts which are then compared with the known ground truth.