Social Paper: Julio Vega

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This is a social paper for the 4th Symposium on Computing and Mental Health: Understanding, Engaging, and Delighting Users [1]. My work focuses on human behaviour modelling using ubiquitous technologies to support healthcare. I am a Research Associate at the School of Computer Science at the University of Bristol collaborating with Dr Roisin McNaney. We are working on an unobtrusive approach for detecting self-abuse (non-suicidal self-harm and binge eating disorder with or without purging) using digital phenotyping [3]. Informed by workshops with stakeholders, our goal is to identify self-abuse triggers on an individual basis and in the wild, using phone and social interaction traces inferred from smartphone data collected over six weeks.

In my doctoral research, I explored a personalised methodology for Parkinson's monitoring using smartphones. I found out that location and physical activity smartphone-based features are suitable to track patients' daily self-reported fluctuations in fatigue, pain, and gait. In addition, I am collaborating with researchers from the University of Oulu and the University of Washington in the Sentient Tracking Of Parkinson's project, exploring the potential of a mobile game to track Parkinson's tremor and medication intake [2]. I am also the creator of PaperStream, a software tool that researchers use to generate paper diaries or surveys that can be automatically transcribed into a CSV file [4].

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CHI '19, May 04–09, 2019, Glasgow, UK