

Human Factors in Software Engineering.

Contact:

David Bowes d.h.bowes@herts.ac.uk,

Nathan Baddoo n.baddoo@herts.ac.uk

We are interested in the impact of Human Factors on the success of software development projects. In particular, we are interested in how software developer motivation and personality influences or is influenced by the job characteristics of software development. We are exploring these human factors with the overall aim of gaining sufficient insight to enable us determine better ways of improving the quality of the results of software development endeavours. We have published a model of the relationship between human factors and the outcomes of software development. We are looking for a PhD student who will be interested in working to evolve this model by revalidating in different development contexts, in order to explore hitherto unrealised dimensions. For example, this work may focus on the applicability of the published model in new development approaches that lean more towards the Agile approach to software development.

We are also interested in the relationship between human factors and the type and frequency of different faults that they introduce while creating and maintaining code.

References to recent work:

Hall, T., S. Beecham, N. Baddoo, H. Robinson, and H. Sharp (2009) A Systematic Review of Theory Use in Studies Investigating the Motivations of Software Engineers *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 18 (3)

Sharp, H., Baddoo, N., Beecham, S., Hall, T. and Robinson, H., (2009) Models of Motivation in Software Engineering, *Information and Software Technology Journal*; **51** (1), pp. 219- 233

Baddoo, N., Beecham, S., Hall T, Robinson H., Sharp H, (2008) Building a Theoretically Reflective Model of Software Engineers' Motivators, *15th European Conference, EuroSPI 2008*, Dublin, Ireland, September 3-5, 2008

David Bowes, Tracy Hall, and Helen Sharp. 2016. Slip Slap Slop: Human Developer Characteristics and Code Faults. XP 2016