Introduction to the Open Movements Mini-track

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The Open Movements mini-track covers research questions associated with free/libre and open source software, open content, open access publishing, and open communities. The study of open projects and the organizations, and the individuals who contribute to them spans a wide range of social, technical and business concerns.

This year the Open Movements mini-track accepted the six submissions. A recurring theme in the track is the methods and impact of introducing elements of order and intelligence into the chaos that is the inherent nature of open movements, which are volunteer-based.

The paper *Who Will Remain?* by authors Schilling, Laumer and Weitzel presents a study of Google Summer of Code participants to identify predictors of sustained contribution to open source projects. Progress in this area will help open source projects focus their efforts to attract and retain contributors and thereby extend or perpetuate the project lifespan.

In *An Empirical Study of Volunteer Members’ Perceived Turnover*, authors Yu, Benlian, and Hess find administration, rather than collegiality, to be a crucial factor influencing whether open source contributors stay with the project.

The paper *Describing the Software Forge Ecosystem* by author Squire presents an interesting study of the range of large-scale cloud infrastructures that have been created to support the development of open source software. A major issue is the extent to which the open source software forges are themselves open enough to support study of the projects they host and the processes used by those projects.

The paper *Network-based Analysis* by authors Le and Panchal present a study of the popular open source web tool Drupal as an illustration of how network analysis metrics can be used to study the structure of software products.

In *Citizen Engineering*, authors Zhai, Hachen, Kijewski-Correa, Shen and Madey present a different sort of open movement, in which users solve real-world problems through massive-scale cooperation. A data mining approach is used to steer large numbers of small contributions of human work towards solving large tasks.

Finally, in *Goals and tasks: Two typologies of citizen science projects*, authors Wiggins and Crowston present a typology of citizen science projects, that is, projects that involve members of the general public as participants. The typology is based on the participant tasks and project goals reported on a survey of project leaders.

Open Movements continue to gain market share and importance in our digital age. Studies such as those presented in this mini-track will continue to improve our understanding of the similarities and differences between open and traditional forms of digital construction, in order to identify ways to improve development processes, both public and private.