The Sky Is Not the Limit: Multitasking Across GitHub Projects

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The paper analyzed here is
https://www.cs.ucdavis.edu/ filkov/papers/icse2016focus.pdf

The paper in question aims to analyze how Multitasking affects a programmers's performance. Tools like GitHub have allowed programmers to work on multiple Projects at ease, however, multitasking comes at a cognitive cost. Frequently switching projects and contexts can lead to distractions, sup-par work, and greater stress. This paper aims to analyze ecosystem-level data on a group of programmers working on a large collection of projects and in turn develop models to measure the rate and breadth of a developers' context-switching behavior. The paper manages to conclude that the most common reason for multitasking is interrelationships and dependencies between projects and that the rate of switching and breadth (number of projects) of a developer's work matter.

To reach the conclusion, the paper uses p-values and the 95% confidence intervals in order to test the hypothesis. However we know we cannot rely solely on them as that can lead to small P values even if the declared test hypothesis is correct, and can lead to large P values even if that hypothesis is incorrect. For instance, in the paper a p-value of 0.01 is achived for most of the factors however, factors such as "Feeling more productive" is a subjective matter and a p-value shoudn't be the only thing that decides the success of a research study.