

Collaboration Networks in Software Development: Perspectives from Applying different Granularity Levels using Social Network Analysis - Research in progress

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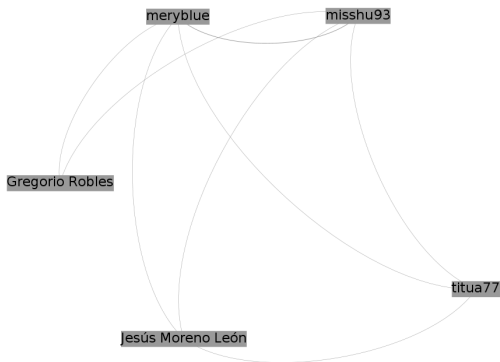
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July 4, 2015

- Large software projects may involve a lot of developers (Sometimes thousands of them!).
- Our interest is to understand better how developers collaborate and how this interaction evolves over time.
- We opted to study Free/Libre and Open Source Software (FLOSS) projects due to the easy, public data availability in websites like GitHub.

How do we study collaborations?

- Using Social Network Analysis techniques we get collaboration networks.



In these network graphs:

Nodes = Developers

Two developers (nodes) are connected if they have collaborated together.

Edges = Collaborations

Edges width represents the amount of collaboration (The wider the edge, the greater is the number of interactions between those two nodes).

- In most social network studies the resulting network is based on file/module-based data.
- If there is a collaboration between two developers in the same file/module, these developers are connected.

Heading

- 1 Statement
- 2 Explanation
- 3 Example

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Table

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Table : Table caption

Theorem

Theorem (Mass–energy equivalence)

$$E = mc^2$$

Example (Theorem Slide Code)

```
\begin{frame}  
\frametitle{Theorem}  
\begin{theorem}[Mass--energy equivalence]  
$E = mc^2$  
\end{theorem}  
\end{frame}
```

Figure

Uncomment the code on this slide to include your own image from the same directory as the template .TeX file.

An example of the `\cite` command to cite within the presentation:

This statement requires citation [Smith, 2012].



John Smith (2012)

Title of the publication

Journal Name 12(3), 45 – 678.

- Punto 1
- Punto 2
- Punto 3

The End