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Drawing the Big Picture: Analyzing FLOSS Collaboration with Temporal Social Network Analysis.

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Abstract.

How can we understand FOSS collaboration better? Can social issues that emerge be identified and addressed before it is too late? Can the community heal itself, become more transparent and inclusive, and promote diversity? We propose a technique to address these issues by quantitative analysis of social dynamics in FOSS communities. We propose using social network analysis metrics to identify growth patterns and unhealthy dynamics; giving the community a heads-up when they can still take action to ensure the sustainability of the project.

Biography.

Amir Azarbakht is a PhD student in computer science at Oregon State University. His research focuses on Social Network Analysis (SNA) on online communities, especially Free/Libre Open Source Software (FLOSS) communities. He earned his master's degree in Human-Computer Interaction and Artificial Intelligence at Chalmers University of Technology in Gothenburg, Sweden, and holds a bachelor's degree in computer engineering from Azad University of Central Tehran, Iran. He is currently working on a project that focuses on analyzing online communications of online FLOSS communities, particularly the ones that have forked, to identify common measures in such complex networks. Temporal visualization of these complex communication networks over time is another focus of the project which aims to array disparate information to make sense of the underlying structure and dynamics of such social networks. He is trilingual, a GNU/Linux user and advocate, and an avid traveler who has visited 9 countries and has lived on three continents and is aiming to work as a data scientist.