Strategic Social Network Analysis

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How can individuals and communities protect their privacy against social network analysis techniques, algorithms and other tools? How do criminals or terrorists organizations evade detection by such tools? Under which conditions can these tools be made strategy proof? These fundamental questions have attracted little attention in the literature to date, as most social network analysis tools are built around the assumption that individuals or groups in a network do not act strategically to evade such tools. With this in mind, we propose in this project a new paradigm for social network analysis, whereby the strategic behaviour of network actors is explicitly modeled. Addressing this research challenge has various implications. For instance, it may allow two individuals to keep their relationship secret or private. It may also allow members of an activist group to conceal their membership, or even conceal the existence of their group from authoritarian regimes. Furthermore, it may assist security agencies and counter terrorism units in understanding the strategies that covert organizations use to escape detection, and give rise to new strategy-proof countermeasures.