

Abstract for Sunbelt 2006
Investigating Evolution of Community in Blogs
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Blogging has become the newest communication medium for social interactions and creating a virtual community, a set of blogs linking back and forth to one another's postings, while discussing common topics. Social interactions around blogging have been studied previously by Nardi et al. (2004), by Blanchard (2004), and by Herring et al. (2005). In this paper, we examine how communities can be discovered and grown from the structure of blogs. Past research for identifying community has involved using content analysis (Wei et al., 2004), examining artefacts using Jones' concept of a virtual settlement (Efimova and Hendrick, 2005), and clustering algorithms such as Kleinberg's bursty algorithm (Kumar et al., 2003) and Kohonen's self-organizing map (Merelo-Guervos et al., 2004). Our methodology involves creating a framework for detecting structures in the social network of blogs that can indicate possible community. We apply social network analysis on blogs using Pajek for various timeframes of the blog to obtain snapshots of the social network. We make the analogy that growth of community in blogs can be compared to growth of an individual, and that specific stages in the life of an individual can also be applied to the life of a blog. To evaluate community, we describe our quantitative framework that involves using centrality measures such as degree centrality, closeness centrality and betweenness centrality. We apply our methodology to a case study of a blog that we created for Canadian independent music to measure the community effects in blogging, and report our results.