

**Video Annotation using RDF**

By

Tiffany R. Newsome

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Approved:

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Mukkai S. Krishnamoorthy  
Thesis Advisor

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Jeffrey C. Trinkle  
Committee Member

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David E. Goldschmidt  
Committee Member

Rensselaer Polytechnic Institute  
Troy, New York

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## ABSTRACT

As high-speed Internet connections become the norm, video clips are becoming commonplace on the World Wide Web. A growing problem is the inability to search for video clips, in particular search within video clips. Currently, keywords are associated with video clips on Web sites such as Google™ Video and YouTube, enabling keyword-based search; however, such search is powered only by human-designated keywords, making video search unreliable and not scalable. Search engines need more accurate and semantically descriptive annotations [20].

A promising solution to the problem of video search is video annotation using the Resource Description Framework (RDF), a formal representation model defined by the World Wide Web Consortium for the description of resources using machine-readable metadata [18]. Annotating video clips using RDF can help users find video clips on the Web more effectively by improving keyword-based Web search and enabling search queries via the emerging Semantic Web [18].

In this thesis, we describe the Video RDF Annotator, an interactive system we developed to annotate video clips by generating RDF statements, which subsequently serve as input to semantics-based search engines and other semantically enabled applications.