Using Semantic Technologies to Construct Research Topicology

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Introduction

- Motivation: Well connected graph of Authors, Publications and Topics find numerous applications in areas of information mining, pattern analysis and data visualisation.
- Proposal: To create triples representing the above associations and with inferred data using Semantic Web Technology.
- Related Works: Semantic Web Conference Corpus, Google Scholar , PubZone

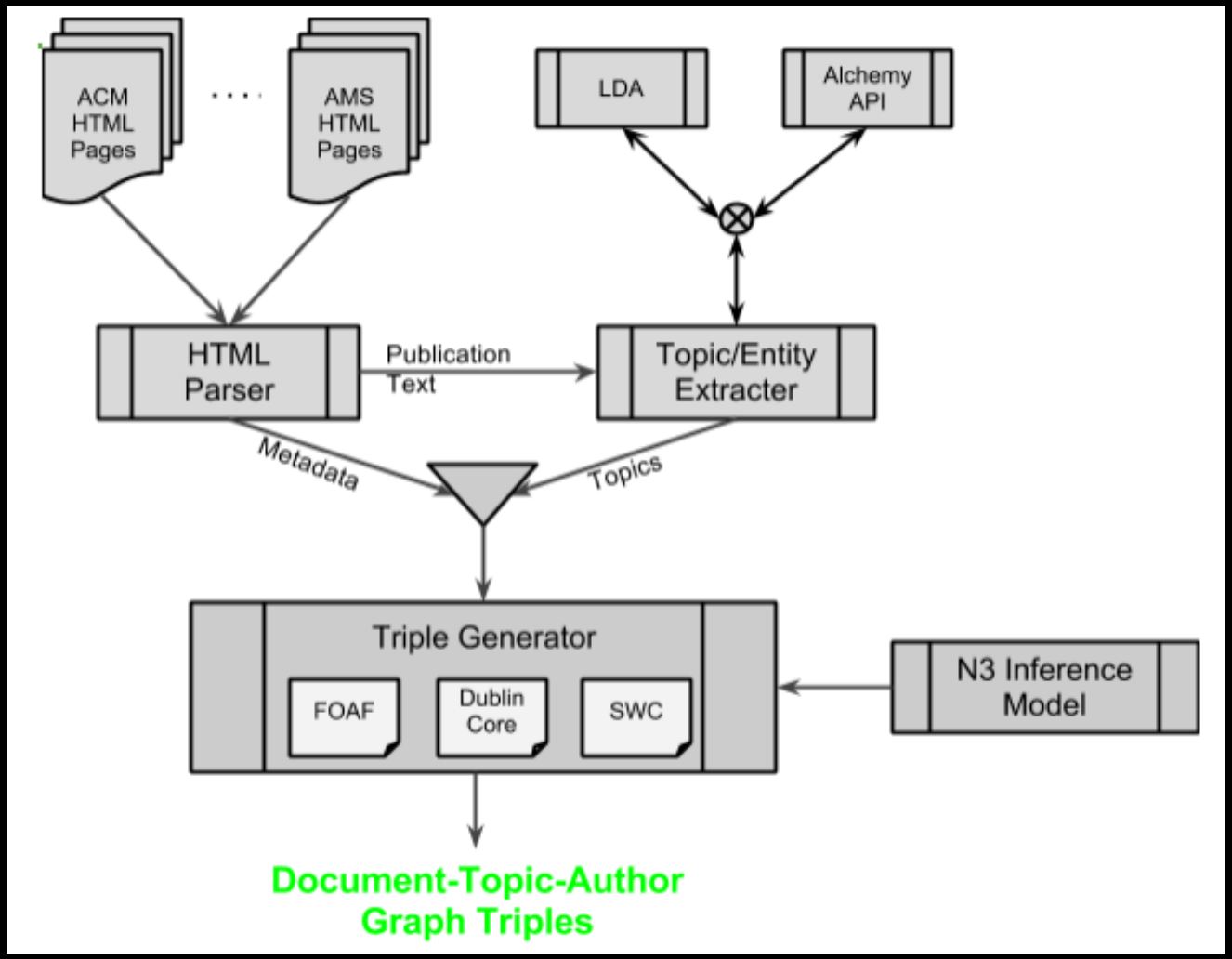
Proposed Approach

Data store: Publication/conference portal ACM

Topic/Entity extraction: LDA (Latent Dirichlet Allocation) libraries and/or Alchemy API

Ontologies: Dublin Core, FOAF and SWF ontology for storing the triples describing authors, topics and documents.

Workflow Diagram



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