Abstract

Our goal is to suggest Subject Matter Experts for addressing issues submitted to the Jet Propulsion Laboratory’s Problem Reporting System. In a large community, enlisting potential collaborators and subject matter experts greatly impacts the success of a project. Inferring identification and ranking candidates’ relevant knowledge to a task or project is necessary to inform recruiting of impactful teams [4]. Topic modeling, such as Biterm Topic Model (BTM) [3,7], Latent Dirichlet Allocation (LDA), and Cor- related Topic Model (CTM), have long been used to group related topics [2]. Likewise, author modeling has been used to measure attribution [5] and contribution [1]. Author-Topic modeling establishes a strategy to map both authors and documents to the same topic-space over a vocabulary [6]. Employing the ATM, this system is able to identify and rank relevant contributors from a project description. This approach should generalize to many other document collections with attribution.