SAPTHAGIRI COLLEGE OF ENGINEERING

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Department of Computer Science and Engineering

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Mini Project Work entitled **"ANALYSING SENTIMENTS IN ONE GO: A SUPERVISED JOINT TOPIC MODELLING APPROACH"** carried out by **SYED MUSTAQEEM (1SG11CS102)**, bonafide students of **Sapthagiri College of Engineering**, in partial fulfillment for the award of **Bachelor of Engineering** in **Computer Science and Engineering** of **Visvesvaraya Technological University, Belagavi** during the academic year 2017-2018. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Project Work (10CS85) prescribed for the said degree.

Shruthi N		14/6/18
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
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EXTERNAL EXAMINATION

Name of the Examiners	Signature with Date
1. S. Sujaya Prakash	S. 14/6/18
2. _____	_____

ABSTRACT

This work focuses on modeling user-generated review and overall rating pairs, and aim to identify semantic aspects and aspect-level sentiments from review data as well as to predict overall sentiments of reviews. We propose a novel probabilistic supervised joint aspect and sentiment model (SJASM) to deal with the problems in one go under a unified framework. SJASM represents each review document in the form of opinion pairs, and can simultaneously model aspect terms and corresponding opinion words of the review for hidden aspect and sentiment detection. It also leverages sentimental overall ratings, which often comes with online reviews, as supervision data, and can infer the semantic aspects and aspect-level sentiments that are not only meaningful but also predictive of overall sentiments of reviews.