

# A Structural, Time Aware, Coordinated Tag Generation Based on Transformer Network

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**Abstract:** *The content quality of shared knowledge in Stack Overflow (SO) is critical in supporting software developers with their programming problems. Thus, it allows its users to suggest editing the software to improve the quality of a post. However, existing all research shows that many suggested edits in SO are rejected due to undesired contents or violating editing guidelines. Such a scenario frustrates or demotivates users who would like to conduct good-quality edits. we propose Semantically Tag and Score Recommendation, with the use of the deep learning-based approach that automatically recommends tags or grades or scores through learning the semantics of both tags, score, grade and questions in such software CQA. First, word embedding is employed to convert text information to high-dimension vectors for better representing questions and tags. Second, a Multitasking, the core modules of Semantically Tag and Score Recommendation, is designed to capture short and long semantics. Third, the learned semantic vectors are fed into a gradient descent-based algorithm for classification.*

**Keywords:** Tag Generation

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