GAI Developments in Auto-Peer: Enhancing the Automated Peer-Review Experience

Philip McCarthy
pmccarthy@aus.edu
Associate Professor of Linguistics, American University of Sharjah

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ABSTRACT

This presentation examines the role of Generative Artificial Intelligence (GAI) in enhancing Auto-Peer, an Automated Writing Evaluation (AWE) tool designed to simulate peer-review experiences in student writing. Auto-Peer currently offers context-sensitive feedback on 25 aspects of writing, such as sentence structure, paragraph coherence, and argument development. Its design shifts away from merely identifying errors, instead focusing on what is 'unusual' or unexpected in the text, prompting students to either modify their writing based on the feedback or justify why their current approach is appropriate. While the Auto-Peer tool has been highly successful in improving student writing, recent GAI developments have enabled the tool to provide even more dynamic and formative feedback. These advancements allow Auto-Peer to move beyond traditional corrective feedback, offering more sophisticated insights into idea generation, organization, and critical reasoning, thus providing a comprehensive support system for student writers. The focus of this talk will be on how Auto-Peer's GAI-powered features enhance the student writing experience throughout the entire writing process. The presentation will explore how the tool promotes learner autonomy by offering realtime, formative feedback that encourages students to self-edit and iteratively improve their work. Additionally, the talk highlights how Auto-Peer reduces instructor workload by automating peer review without compromising feedback quality. Finally, the talk discusses the future potential of Auto-Peer and how it can evolve as GAI technologies advance, reshaping peer review and writing instruction for diverse learners and educational contexts.