

To the Admission Review Committee,

It is my pleasure to write a recommendation letter to my student, Mohammed Latif Siddiq, who is willing to get admission for a doctoral degree at the University of Notre Dame. I supervised his undergraduate thesis on SQL injection vulnerability removal through code refactoring using machine learning. But I knew him from his fourth semester, as I took the Database Management course. He was always a very responsive student and liked to ask questions whenever he had some confusion. His thesis work was not finished successfully, and I am very impressed with his performance. In the time I've known him, I found him very zealous, dedicated, and hard-working. He has a good foundation for empirical software engineering, security vulnerabilities, and machine learning. Therefore, I think he will be a good addition to your program.

As my undergraduate thesis student, Latif was working on the application of unsupervised learning to remove SQL injection vulnerabilities through code refactoring. He was the first author of the paper that was recently accepted to an international IEEE conference, SANER 2021. Although the motivating paper had some ambiguous definitions, he was able to continue his work and proved the power of his intuition while working on the implementation phase. The dataset that he and his thesis partner have prepared through mining from the web and correcting it manually one by one, is also a great contribution to the code refactoring community. Latif is also an attentive reader of the literature that helps generate interesting hypotheses and improves remarkable problem-solving ability.

During the meetings related to the thesis work, I have always found him clear and concise while discussing his work or the difficulties he is facing. He is never shy about asking for help and always does his research before attending the meeting so that he has a proper idea why he is stuck. Moreover, he has always shown a precise idea of why some proposals should work and why others should not. When stuck with some obstacle, he is prepared to work for days until the problem is solved and never steps back.

Latif is very dedicated to his work and is not shy of challenges. I highly recommend him for your program. Please feel free to contact me with any queries.

Sincerely,
Professor 1