

30/Nov/2025

To Whom It May Concern

It is my pleasure to write this letter of recommendation for Oussama Makhbouche in support of his application for graduate studies .

As a professor at King Saud University, I am currently teaching Oussama in my SWE434 (Software Testing and Validation) course. This is an advanced core engineering module where Oussama has distinguished himself as one of the top-performing students, demonstrating a rigorous approach to software quality. During the course, Oussama has displayed a strong aptitude for verification methodologies and critical analysis of software systems. He has mastered the complex syllabus of software testing, showing excellence in the following key areas:

- 1. Test Design Techniques & Methodologies:** Oussama demonstrated a solid grasp of both Black-Box and White-Box testing strategies. He effectively applied techniques such as Equivalence Partitioning and Boundary Value Analysis to design robust test cases. Furthermore, he showed great proficiency in structural testing methods, including Path Testing and calculating Cyclomatic Complexity to ensure comprehensive code coverage.
- 2. Validation, Verification & Test Management:** He excelled in understanding the full V&V lifecycle. Oussama proved himself capable of managing the testing process, including static verification and dynamic validation, professionally, from developing detailed Test Plans and Test Scripts to generating comprehensive Test Reports.
- 3. Levels of Testing & Automation:** A significant portion of our curriculum focuses on the different levels of testing. Oussama performed exceptionally well in implementing Unit Testing, Integration Testing, and System Testing. He also demonstrated a keen interest in Regression Testing and the use of automated testing tools, bridging the gap between manual execution and modern Test Automation practices.

Beyond his academic performance, Oussama is an active participant in class, often asking insightful questions that demonstrate a genuine curiosity for software reliability and security.

I am confident that Oussama possesses the technical foundation and the engineering discipline necessary to succeed in a specialized Master's program, particularly those focused on Software Engineering, System Validation, or Quality Assurance. I recommend him without reservation.

Sincerely,



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