



**IEEE 4th International Conference on Computing and Machine  
Intelligence**  
**April 05-06, 2025**  
**Central Michigan University**

# **CERTIFICATE**

## **of Participation**

**This certificate is presented to**  
**Gokul Ramakrishnan**

**For participating and presenting the**  
**paper titled:**  
**Designing Scalable Real-Time Web Applications for**  
**Seamless User Experiences**

A handwritten signature in blue ink, appearing to be "AK".

**General Chair**  
**Ahmed Abdelgawad, PhD**