

A context-aware, multimedia, multi-modal, and language independent big data-based dyslexia screening framework with auto-grading capability

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In this talk, we will present a tablet-based big data multimedia environment, which uses text, audio, video, and gaze movement to detect a set of symptoms of having dyslexia. Multi-modal, language-independent screening test modules have been developed, which gives indications of further dyslexia diagnosis necessity. The multimedia retrieval framework is envisioned to accelerate and ease

the process of testing dyslexia at the global level, and to identify and auto assess potential dyslexic patterns and to accumulate huge collection of multimedia test data for in-depth clinical dyslexia pattern analysis.

Biography

Elham Hassanain is an Assistant Professor in the Department of Forensic Computing and Cyber Security, University of Prince Muqrin (UPM), Madinah Al Munawwarah, Kingdom of Saudi Arabia. She served as the Vice Dean of College of Computer and Information Systems at Umm Al-Qura University. She also served as a Member of Saudi Parliament for duration of four years. Currently she is the Deputy Rector for Academic Affairs of University of Prince Muqrin. Her research interests include e-Health, cloud and multimedia for healthcare, IoT, and smart city. She has publications in refereed IEEE/ACM journals and conferences. Recently, she has been awarded 1 US patent on vision therapy. She has served as a Member of the organizing and technical committees of several workshops.

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