Intelligent Document Management System for Automatic Writer Identification

Benefits and Outcome of selected QNRF Projects

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QNRF Projects

NPRP


A CAD system for the Classification and Diagnosis of Tissue Patterns in Colorectal Tumours using Visible and Non-Visible Multispectral Imagery, QNRFF – NPRP, $908,000, 3 years, (2014-2017), Principal researcher.


UREP

Project Time Management for Qatar Petroleum, QNRFF – UREP, $18,000, 6 months, (6 2009 to December 2010)

Project Portfolio and Performance and Management System (PPMS), QU – Student Grant, QR 22500, 1 year, (2008-2009)

Project Title: Intelligent Document Management System for Automatic Writer Identification

Project Objectives

- To develop an intelligent document management system that can be used for Arabic forensic writer identification in Qatar forensic labs.
- Develop a novel feature extraction system to extract distinctive and most discriminating features from handwritten documents.
Benefits/Potential Applications/Customers/Markets

• Court of justice where one must come to a conclusion about the authenticity of a document (e.g. a will).
• Banks for signature verification.
• Questioned document examination is extensively used by forensic specialists for criminal identification.
• Museums and libraries to identify the various writers who took part in the drafting of a manuscript or who made corrections.
Key Outcomes

• A new system for writer identification, signature verification, Automatic prediction of age, gender, handedness and nationality in offline handwriting.
• Won two international competitions in writer identification and 1st place on ICT poster competition hosted by Qatar University Research Forum (QURF)
• New datasets
• Organized four Competitions and two workshops on Handwriting recognition.
• 16 published papers and 6 more to be published.