



Special Session On

Integration Techniques in Computational Forensics (ITCF'2010)

Under the framework of the International Conference of Soft Computing and Pattern Recognition (SoCPaR 2010),

7-10 December, 2010, Paris, France

Conference Web Page: <http://www.socpar.org>

Session Chairs

Prof. Hussien Zedan

Research Professor and Technical Director
of Software Technology Research Lab.
De Montfort University Leicester
UK
Email: zedan@dmu.ac.uk
Lab url: <http://www.cse.dmu.ac.uk/STRL/>

Dr. Hala Shawky Own

Department of Solar and Space Research,
National Research Institute of Astronomy and Geophysics
Cairo, Egypt
E-mail: halaown@gmail.com

Introduction: In recent years, mathematical, statistical and computational science methods have found extensive applications in developing new procedures for crime investigation, prosecution and the enforcement of law. Computer-based methods have also become important tools for performing certain forensic functions. Computational Forensics (CF) is an emerging research domain. It concerns the investigation of forensic problems using computational methods, with the primary goal of discovery and advancement of forensic knowledge. CF works towards in-depth understanding of a forensic discipline, evaluation of a particular scientific method basis, and systematic approach to forensic sciences by applying techniques of computer science, applied mathematics and statistics.

The integration of different computational forensic techniques enables the forensic practitioner to:

- Reveal And Improve Traces Evidence For Further Investigation,
- Analyze And Identify Evidence In An Objective And Reproducible Manner,
- Assess The Quality Of An Examination Method,

- Report And Standardize Investigative Procedures,
- Search Large Volumes Of Data Efficiently,
- Visualize And Document The Results Of Analysis,
- Assist In The Interpretation Of Results And Their Argumentation,
- Reveal Previously Unknown Patterns / Links, To Derive New Rules And Contribute To The Generation Of New Knowledge.

The Aim Of This Workshop Is To Provide Updated Overview Of The Latest Trends And Developments Of Integrated Computational Methods For Forensic Investigation Services.

- Counterfeit Detection
- Forensic Data - Handwriting
- Law Enforcement
- Access Control Systems
- Information Retrieval For Forensics Policy
- Forensic Document Analysis
- Computational Methods For The Following Forensic Disciplines:
Anthropology, Ballistics, Biology, Fiber Analysis, Fire Debris,
Pathology, Physiological And Behavioral Patterns, Prints, Questioned
Documents, Ridge Skin Impressions, Tire Impressions, Tool Marks, Trace,
Shoepriints, Vehicles.
- Computational Intelligence In Forensics:
Rough Set, Fuzzy Logic, Neural Networks, And Evolutionary Computation.

Program Committee:

TBA.

Instructions for Authors:

Papers must correspond to the requirements detailed in the (paper submission) on the conference web page <http://www.socpar.org/papersubmissions.html> All accepted papers will be compiled in conference proceedings published by the IEEE Computer Society's Conference Publishing Services.

Important Dates:

Deadline for Paper Submission	July 15, 2010
Notification for Acceptance	August 15, 2010
Deadline for Camera Ready Manuscript	October 30, 2010