

THE UNIVERSITY OF
WARWICK



14th ACM Workshop on Multimedia and Security

Program: 6 & 7 September 2012

SUPPORTED BY COST ACTION IC1106

General Information

Registration

Registration will be in the Scarman House (*see building 54, C3 on campus map*) from about 08.00 on the first day of the conference, your contact will be Yvonne Carty.

Workshop Sessions

All workshop sessions will be held in Scarman House, Meeting Room 9.

Internet Access

Internet access will be available for all delegates, ask at Scarman Main Reception for id and password.

Car Parking

Free car parking is accessible via a barrier-operated system at Scarman House. Disabled parking spaces are available at the front of the car park.

Meals

1. Breakfast (for those with accommodation) is served in Rootes Restaurant (*see building 53, C6 on campus map*) if you are staying in a Conference Park Room.

If you are staying in Scarman House it will be served in the main restaurant.

2. Lunch on 6th September will be in a private dining room next to restaurant and on 7th September will be served in the Court Yard in Scarman House.

3. Dinner on 6 September will be part of the excursion to Warwick Castle. (See Appendix for details).

Special Needs:

Any participant with special needs such as mobility please contact Yvonne Carty on telephone: 02476573798 or email: Y.J.Carty@warwick.ac.uk

Thursday 6 September 2012

Registration: Scarman House

08.00 – 09.00	Registration - (See 39 on Campus Map)
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Welcome: All Workshop Sessions will be held in Meeting Room 9

09.00 – 09.10	Welcome	Chang-Tsun Li
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Keynote Speech:

09.10 – 10.00	Emilio Mordini, Centre for Science, Society and Citizenship	Ethical and Societal Implications of New and Emerging Forensic Biometrics
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10.00–10.30 Coffee Break

Session 1: Data Hiding

Chair: Andrew Ker

10.30 – 10.55	Batch Steganography in the Real World	Andrew Ker; Tomas Pevny
10.55 – 11.20	Steganalysis with Mismatched Covers: Do Simple Classifiers Help?	Ivans Lubenko; Andrew Ker
11.20 – 11.45	Frame-accurate Temporal Registration for Non-blind Video Watermarking	Severine Baudry
11.45 – 12.05	Performance and Code Length Optimization of Joint Decoding Tardos Fingerprinting	Waldemar Berchtold; Marcel Schäfer

12.05–13.30 Lunch (Scarman House, Private Dining)

Session 2: Pattern Recognition and Security for Crime Scene Forensics Traces: From Latent Fingerprints up Material and Technical Traces

Chair: Jana Dittmann

13.30 – 13.55	Embedding Cylinder Quality Measures in Minutia Cylinder-Code Based Latent Fingerprint Matching	M. Hamed Izadi; Andrzej Drygajlo
13.55 – 14.20	On Using Flat Bed Scanners for the Age Determination of Latent Fingerprints: First Results for the Binary Pixel Feature	Ronny Merkel; Claus Vielhauer

14.20–14.50 Coffee Break

Session 2: (continued)

14:50 - 15:15	A First Approach for the Contactless Acquisition and Automated Detection of Toolmarks on Pins of Locking Cylinders Using 3D Confocal Microscopy	Eric Clausing; Christian Kraetzer; Jana Dittmann ; Claus Vielhauer
14.15 - 15:40	First approach for a computer-aided textile fiber type determination based on template matching using a 3D laser scanning microscope	Christian Arndt; Christian Kraetzer ; Claus Vielhauer
15.40 – 16.05	Forensic Ballistic Analysis using a 3D Sensor Device	Robert Fischer ; Claus Vielhauer

17.00–22.30 Excursion and Banquet – Warwick Castle (see Appendix)

Friday 7 September 2012

Special Note: For those who are attending COST IC1106 Working Group Meeting (see page 5)

Session 3: Security Applications		
		Chair: Yongjian Hu
09.00 – 09.25	Privacy-Preserving Content-Based Recommender System	Zekeriya Erkin; Michael Beye; Thijs Veugen ; Reginald Lagendijk
09.25 – 09.45	Length-preserving bit-stream-based JPEG encryption	Andreas Unterweger ; Andreas Uhl
09.45 – 10.05	Automatic Telephone Handset Identification by Sparse Representation of Random Spectral Features	Yannis Panagakis ; Constantine Kotropoulos

10.05–10.35 Coffee Break

Session 4: Forensic Challenges		
		Chair: Mauro Barni
10.35 – 11.00	A Universal Technique to Hide Traces of Histogram-Based Image Manipulations	Mauro Barni; Marco Fontani; Benedetta Tondi
11.00 – 11.20	Recognizing pornographic images	Sotirios Karavarsamis; Ioannis Pitas ; Nikos Ntarmos
11.20 – 11.45	Unexpected Artefacts in PRNU-Based Camera Identification: A 'Dresden Image Database' Case Study	Thomas Gloe; Stefan Pfennig ; Matthias Kirchner

11.45–13.20 Lunch (Scarman House, The Court Yard)

Session 5: Biometrics & Security I (COST ACTION IC1106 Special Session)		
		Chair: Claus Vielhauer
13.20 – 13.45	A methodological framework for investigating age factors on the performance of biometric systems	Meryem Erbilek ; Michael Fairhurst
13.45 – 14.10	Enhancing Face Recognition at a Distance using Super Resolution	Nadia Al-Hassan; Sabah Jassim ; Harin Sellahewa
14.10 – 14.35	An evaluation of biometric fingerprint matchers in a forensic context using latent impressions	Rainer Kärgel; Mario Hildebrandt ; Jana Dittmann
14.35 – 14.55	An Adaptive System for Gait Recognition in Multi-View Environments	Yu Guan; Chang-Tsun Li ; Yongjian Hu

14.55–15.25 Coffee Break

Session 6: Biometrics & Security II (COST Action IC1106 Special Session)		
		Chair: Claus Vielhauer
15.25 – 15.45	Frontal Gait Recognition Combining 2D and 3D Data	Athira Nambiar; Paulo Correia ; Luis Soares
15.45 – 16.10	Appearance-based people recognition by local dissimilarity representations	Riccardo Satta; Giorgio Fumera; Fabio Roli
16.10 – 16.35	Experimental Results on the Feature-level Fusion of Multiple Fingerprint Liveness Detection Algorithms	Luca Ghiani; Gian Luca Marcialis ; Fabio Roli
16.35 – 17.00	Privacy Preserving ECG Quality Evaluation	Riccardo Lazzeretti; Jorge Guajardo ; Mauro Barni

17.00 Conference Closes

COST IC1106 WORKING GROUP MEETING

Syndicate Room 30 – Scarman House

Session I:	09.00 – 10.00	
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10.00–10.35 Coffee Break

Section II:	10.35 – 11.35	
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Appendix – Warwick Castle and Dinner

16.50	Meet in Scarman House Main Reception Area
17.00	Board Coach to Warwick Castle
17.30	Arrive Warwick Castle, escorted tour round castle
19.00	Reception Drink at Coach House
19.30	Costume guide to lead you to dinner
20.00	Dinner, drinks and entertainment
22.30	Event concludes, return back to campus

History of Warwick Castle

“ The history of Warwick Castle stretches back almost 1,100 years. In 914AD Ethelfleda, daughter of Alfred the Great ordered the building of a 'burh' or an earthen rampart to protect the small hill top settlement of Warwick from Danish invaders. ”

(Source: Warwick Castle Web Site)

The following extract taken from History of Warwick Website (<http://www.castles.me.uk/history-of-warwick-castle.htm>)

The History of the site of Warwick Castle dates back to antiquity. Its bloody history is steeped in treachery, murder, mystery and intrigue. The comprehensive Timeline provides details of both the major building work and the major events in history, which occurred in Warwick Castle during the various rules of each of the Kings and Queens of England and the various Earls of Warwick. The owners of Warwick Castle passed through several great dynasties - the Beaumonts and Beauchamps, the Nevilles, the Dudleys, the Richs and the Grevilles. The above links provide even more facts and information about the History of Warwick Castle, the deeds of the various monarchs, the history of the imprisonments, murders and sieges!

The Romans, led by Agricola, built a fort in this area in 79AD! The Romans leave Britain and the Celts are invaded by the Vikings and enlist the Saxons to help fight them. King Alfred the Great negotiates peace with the Vikings and his daughter Aethelflaed, the 'Lady of the Mercians', builds a Burh at Warwick.

In 1066 the Normans led by William the Conqueror, invade England and the Anglo-Saxon Sheriff of Warwickshire, Thorkell of Arden, turns traitor and supports William the Conqueror. The 'Traitor Earl' was one of only two Englishmen to retain his estates under William. In 1068 the Warwick wooden

Motte and Bailey Castle was built and Henry de Beaumont holds the Motte and Bailey castle for William the Conqueror. His son, William Rufus creates the earldom of Warwick for Henry de Beaumont who changes his name to Henry de Newburgh. He is appointed as Constable of Warwick Castle. William Rufus also gives him the great estate of Thorkell of Arden thereby betraying the Traitor Earl!

The Wooden Castle is replaced with stone and under siege! The History of Warwick Castle moves on to the signing of **the Magna Carta in 1215**. In 1260 a fortified stone castle replaces the wooden castle. Unrest in the kingdom leads to the Barons War when Simon de Montfort successfully attacks and lays siege to Warwick Castle in which the castle was badly damaged by the mighty siege engines - the Mangonels and Trebuchets requiring the reconstruction of Warwick Castle in 1315.

The reign of Edward III saw the great Chivalric Age and Warwick was the scene of many tournaments, feasts, banquets and processions. History also saw the start of the Hundred Years War between England and France. Thomas de Beauchamp, 11th Earl of Warwick, commanded troops at the battle of Crecy and Poitiers. The glorious Age of Chivalry was also marred by the Black Death and the Peasants Revolt (the first of all revolutions). Richard de Beauchamp, the 13th Earl of Warwick, served in France as Captain of Calais and supervised the trial of Joan of Arc.

The Wars of the Roses History moved on and England enters the period of civil disorder and political instability known as the Wars of the Roses. Richard Neville, the 16th Earl of Warwick, was a Yorkist, and when he helped Edward IV the son of the Duke of York, to become king he became very powerful. He then argued with the King and was branded a traitor. Warwick then changes allegiances and turns Lancastrian when he defeats Edward IV and restores Henry VI to power! He is given the name '**Warwick the Kingmaker**'. Warwick the Kingmaker loses his life at the Battle of Barnet when Edward IV defeats and kills him. The following Earls of Warwick are branded as traitors and executed, temporarily ending the title of the Earl of Warwick...

Richard III took ownership of Warwick Castle until he fell in the Battle of Bosworth Field to Henry Tudor. The Tudor Kings also keep Warwick Castle to themselves ensuring the power and influence of the nobility is contained!

The History of Warwick castle enters another period of murder, executions, treachery and intrigue starting with the short reign of King Henry VIII's son Edward V. John Dudley is created the Earl of Warwick, Chancellor of England and Duke of Northumberland which makes him the most powerful noble in England. The young King was sick and Dudley realises that if the King dies, and either of his sisters take the crown, that Dudley will lose his power and probably his head. John Dudley plots with the Earl of Suffolk and arranges the marriage of his son, Guildford Dudley, to the Suffolk's daughter, Lady Jane Grey. The young king dies and Lady Jane Grey, John Dudley's daughter-in-law is pronounced Queen of England. She only reigns for nine days and the rightful Queen Mary takes the crown. The powerful John Dudley, Duke of Northumberland, was beheaded for treason. The earldom of Warwick is

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granted to the Rich family but Warwick Castle is passed to Sir Fulke Greville. A poet and courtier Sir Fulke Greville was murdered and his ghost is said to haunt Warwick Castle.

An ardent Puritan, Sir Robert Greville, Earl of Warwick, was imprisoned by King Charles I for refusing to take an oath to fight for the king. He became an active member of the parliamentary party. In 1642 Civil war broke out between King and parliament and Warwick Castle successfully withstands a siege by Royalist troops.

Charles II was restored to the throne and the history of Warwick Castle saw its bloody role decline and the castle saw many improvements including those of Capability Brown who was employed by Francis Greville to lay out the grounds of Warwick Castle. The castle became palatial with some wonderful additions.

The Castle survives two World Wars but is nearly destroyed by Fire! In 1978 the Earl of Warwick's son, David, sold the Castle to the Tussard's group, the company which owns Madame Tussaud's in London. The History of Warwick castle concludes as the Tussard's group carry out extensive restorations to the castle and open it to the public.