

NSF United-States/Middle-East Workshop
Trustworthiness in Emerging Distributed Systems and
Networks

Koc University, Istanbul, Turkey

June 4-6, 2012

Cairo University – Computer Engineering
Samir I. Shaheen



Cairo University
Faculty of Engineering
Computer Engineering Dept.

Samir I. Shaheen
June 2012

Faculty of Engineering, Cairo University (CUFE)

**Founded in
1816 At Cairo Citadel**



**196
years**



First # Students	5
Present # Students	15000
Undergraduate	12000
M.Sc – Ph.D	2500



Was almost attached
to something else



Faculty of Engineering, Cairo University Main Campus 1905





Started with 4 Departments

- **Civil**
- **Architecture**
- **Mechanical**
- **Electrical**

Addition since then

- **1940 Chemical Engineering**
- **1943 Mining and Petroleum**
- **1954 Aeronautical Engineering**
- **1960 Metallurgical Engineering**
- **1982 Biomedical Engineering**
- **1992 Computer Engineering**
- **2006 Introduced new inter-disciplinary Programs based on Credit Hour System.**


Report on two activities in Egypt:

- 1. Academy of Science and Technology committee on Security and Social Networks.(Road Maps for Research Projects).**
 - 2. Examples of research activities in Computer Engineering Department, Cairo University.**
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Academy of Science and Technology Committee on Communication and Computer, Information Systems:

1. Social Media Privacy and Security.
 2. Social Aspects of Social Media.
 3. Sentiment and Text Mining and Analysis.
 4. Mobile and Wireless networks .
 5. Cloud Computing
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Social Media Privacy and Security

- Analysis of different privacy and security issues
 - Secure architectures and trusted networks
 - Other privacy-related areas (reliability, software tools, ...etc)
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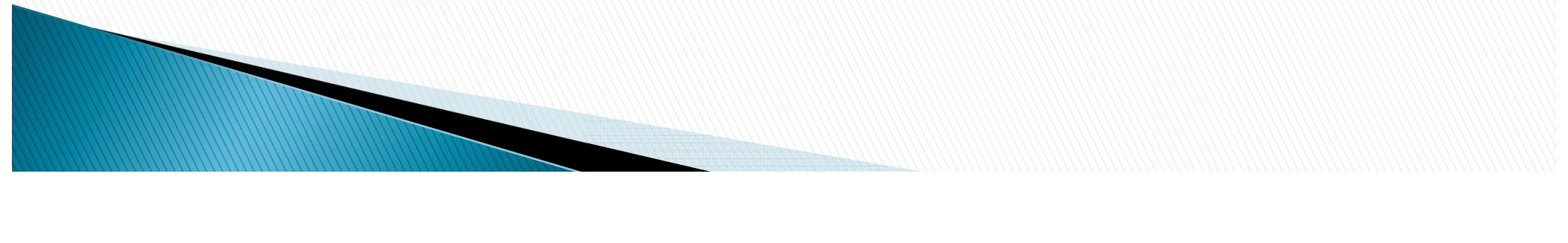
Social Aspects of Social Media

- Social influence (Analysis, games effect, behavior evolution, ...etc)
 - Community detection (Formation, classification, link prediction, ...etc)
 - Social tagging (Recommendation systems, Profile building, ...etc)
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Sentiment and Text Mining Analysis :

- Text and blogs mining and analysis
- Sentiment analysis
- Other mining-related areas (Mining tools, multimedia reviewers mining, ...etc)

Mobile and Wireless networks:

- Collaborative and distributed business systems (e.g. Online team formation).
 - Social media services in (Educational, Medicine and Society).
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Cloud Computing:

- **Computational Power:** Provisioning, virtualization, elasticity/scalability, and accounting.
 - **Storage:** Cloud Storage delivers virtualized storage over a network on demand with a requested quality of service (QoS).
 - **Security:** Security models (targeting confidentiality, integrity, and availability), privacy, access control, identity protection, authentication.
 - **Cloud Engineering:** Architectures, modeling, Interoperability/standardization, APIs, Programming models, verification and validation.
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Computer Engineering, Cairo University –1:

- Using Computational Intelligence for Discovering Dominant Scenarios in Web Log files (via User Profiles).
 - Data Mining Techniques for Fraud Detection in Telecommunication .
 - Real-Time Decision Tree for Intrusion Detection.
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Computer Engineering, Cairo University -2:

- Trust-Based Cross-Layer Model for Wireless Sensor Networks.
 - Sentiment Analysis in Opinion Mining Tasks.
 - Arbitrary Identity Blinding for Enhancing Transferable Electronic Cash Characteristics (Electronic Money/Privacy).
 - Mobile Agents and Network Protection against DDoS Attacks.
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Computer Engineering, Cairo University –3:

Projects with the EU :

- ❑ Cairo University Giza– Egypt.
 - ❑ RWTH Aachen Germany.
 - ❑ Telcom Every – Every France.
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- How students in high school select their studies in the University level, and,
 - Use Social / Academic Data Mining to discover how the social/Economical factors affects their performance in higher education .

For more information Pls Visit:

[www . Cufe . edu . eg](http://www.Cufe.edu.eg)

Contact: sshaheen@cufe.edu.eg

Thank You

