

## Talal A. Edwan



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### CONTACT INFORMATION

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### DATE OF BIRTH

20<sup>th</sup> of May 1979.

### MARITAL STATUS

Single.

### MEMBERSHIP(S)

- Member of Jordan Engineers Association. Division: Electrical Engineering. Sub Division: Electronics Engineering.
- Member of IEEE.
- Member of ACM.

### RESEARCH INTERESTS

- Highspeed/Mobile/Wireless computer and telecommunication networks;
- Congestion control mechanisms with QoS constraints;
- TCP Congestion Control;
- Modelling and Performance Evaluation of computer and telecommunication networks (wired/wireless);
- Network Algorithms;
- Wireless Sensor Networks.

### EDUCATION

Loughborough University, Loughborough, England.  
Ph.D., Computer Networks.

[Oct. 2007 – Sep. 2010]

- Dissertation Topic: “Improved Algorithms for TCP Congestion Control”.
- Supervisor(s): Iain W.Phillips, Lin Guan.
- Examiner(s): [Jon Crowcroft](#), Olaf Maennel.

University of Plymouth, Plymouth, England.

M.Sc., Network Systems Engineering, Aggregate Final Mark = 76 .81% (Excellent), ranked 3<sup>rd</sup>.  
[Sep. 2005 – Sep. 2006]

- Project Title: “Analysis of End-to-End Techniques for Bottleneck Bandwidth & Path Capacity Estimation.”, a passive and novel technique for estimating end-to-end bottleneck bandwidth was proposed.
- Supervisor(s): Bogdan Ghita.

Princess Sumaya University for Technology, Amman, Jordan.

BSc., Electronics Engineering, Cumulative Average = 84 .4% (Excellent), ranked 3<sup>rd</sup>.

[Sep. 1997 – Jun. 2002]

- Project Title: “Arabic Speech Synthesis Application”, using free running Radial Basis Artificial Neural Networks to help disabled people who suffer from pronunciation problems.

Jordanian General Secondary Education Certificate Scientific Stream, Average = 86 .3%.  
[Sep. 1996 – Jul. 1997]

ACADEMIC  
EXPERIENCE

**Loughborough University**, Loughborough, England.  
**Teaching Assistant, Department of Computer Science.** [Sep. 2009]  
Duties included guiding and helping students, leading computer lab exercises.

**Princess Summaya University for Technology**, Amman, Jordan.  
• **Lecturer, King Abdullah II Faculty of Engineering, Department of Computer Engineering.** [Sep. 2012 – \*\*\*]  
Taught Courses: Linear Algebra, Applied Probability, Statistical Methods, and Digital Logic Design.

PUBLICATIONS

- EDWAN, T., GHITA, B., AND WANG, X. Bottleneck Bandwidth Estimation Using Frequency Analysis. In *ICCCN (2007)*, IEEE, pp. 1204–1209.
- EDWAN, T., GHITA, B., AND WANG, X. DSP-based bottleneck bandwidth estimation. *Simulation Modelling Practice and Theory* 17, 3 (March 2009), 538–547.  
Higher Order Delay Functions for Delay-Loss Based TCP Congestion Control. In *Proc. 6<sup>th</sup> Wireless Advanced (Formerly SPWC)* (London, UK, June 2010). (in press).
- EDWAN, T., GUAN, L., OIKONOMOU, G., AND PHILLIPS, I. W. Understanding the impact of link errors on tcp congestion control. In *Proc. 26<sup>th</sup> UK Performance Engineering Workshop (UK PEW 2010)* (Coventry, UK, June 2010). (in press).
- EDWAN, T., GUAN, L., AND PHILLIPS, I. Is Noise always a Bad Signal? An Adaptive Multiplicative Decrease for TCP-Reno using Noise Quantification. In *International conferences on Internet Technologies and Applications (ITA 09)* (Wrexham, North East Wales, UK, September 2009).

PAPERS IN  
PREPARATION

- T. E., ET AL TCP-Gentle: An “Accordion-Bellows” Congestion Window.

SELECTED  
PRESENTATIONS/  
LECTURES

Design and Implementation of TCP-Illinois<sup>n</sup> and TCP-Gentle. Next Generation Networking: Multi-Service Networks Workshop, Cosener’s House, Abingdon, England. [Aug. 2010]  
Can TCP Win the “High-Speed” Race? Department of Computer Science, University College London, England. [Sep. 2010]

WORK  
EXPERIENCE

**National Information Technology Centre**, Amman, Jordan.  
**Computer Networks Engineer** [Jul. 2002 – Aug. 2005]

LANGUAGES

- Arabic.
- English.
- French (Basics).

REFERENCES

Dr Iain Phillips  
• Affiliation: Department of Computer Science/Loughborough University.  
• WWW: <http://www-staff.lboro.ac.uk/eliwp/>  
Prof. Jon Crowcroft  
• Affiliation: University of Cambridge.  
• WWW: <http://www.cl.cam.ac.uk/~jac22/>  
Dr Bogdan Ghitta  
• Affiliation: School of Computing and Mathematics/University of Plymouth.  
• WWW: <http://www.plymouth.ac.uk/staff/bghita>