

# THE UNIVERSITY *of York*

## Professor John A Clark (1992 – present day) Brief Teaching CV

### A. GENERAL

**Name:** John Andrew Clark. MA (Maths, Oxon). MSc (Applied Statistics, Oxon). PhD (Computer Science, Ebor)

**Department:** Computer Science

**Date of Appointment:** October 1992.

**Present Position:** Professor of Critical Systems (since 2005)

**Previous Posts:**

1986-87. Ad hoc tutorials for Oxford colleges, Dept. of Mathematics, Dept. of Economics and Statistics.

1987-92. Security and high integrity software evaluator at Logica. Security R&D think tank.

1992-2001. Lecturer in Safety Critical Systems.

2001-2004. Senior Lecturer in Critical Systems.

### B. RESEARCH PUBLICATIONS SUMMARY

I was originally recruited to set up, develop and deliver an advanced MSc in Safety Critical Software Engineering. I became “research active” at or around 1997. I have authored or co-authored over 140 publications. Details can be found at <http://www-users.cs.york.ac.uk/~jac/Research.html>.

### C. TEACHING

I have been involved in the UG programmes (BSc/BEng CS, MEng, MMath) and also in three MScs. I was originally recruited to help set up the MSc in Safety Critical Software Engineering (SCSE), and also participated strongly in the MSc Software Engineering and MSc Natural Computation. I have also had involvement in externally delivered modules to industry.

### LIST OF MODULES

- 1993. Discrete Mathematics (1<sup>st</sup> year, filling in for colleague on sabbatical)
- 1994-1995. Formal Specification of Software (2<sup>nd</sup> year, developed from scratch, 10 credits)
- 1994. Team Software Project (2<sup>nd</sup> year, 10 credits, with Jim Briggs)
- 1996-1997. Mathematics for Safety (half of 10 credits, developed from scratch).
- 1996-2003. Computer Systems Security (developed from scratch, contribution to 10 credits, also became Security of Computer Systems).
- 1996-1998. Introduction to Safety (MSc, half of 10 credits)
- 1998-2001. Preliminary Mathematics (MSc SCSE, half contribution, 10 credits)
- 1998-2003: Critical systems (4<sup>th</sup> year, contribution to 10 credits).
- 1995-2000. Safety and Reliability 1 (MSc SCSE, developed from scratch, 10 credits)
- 1995. Compiler Construction (2<sup>nd</sup> year, using notes of previous lecturer, 10 credits).
- 1996-2000. Implementation of Programming Languages (2<sup>nd</sup> year, developed from scratch, 20 credits all lectures)
- 1996. Safety and Reliability 2 (MSc SCSE, developed from scratch, 10 credits)
- 1998-2000. Dependable Systems Analysis (MSc SCSE, developed from scratch, 10 credits)
- 1997-2000. Introduction to Software Engineering (MSc SWE, part contribution, 10 credits)
- 1998. Architectures and Device Interfaces (MSc SCSE, part contribution, 10 credits).
- 1998. Management of Safety Critical Projects (MSc SCSE, part contribution to 10 credits)
- 1999-2000. Refinement and proof (MSc SCSE, part contribution, 10 credits)

- 2002-2004. Dependability Modelling (4<sup>th</sup> year MEng, 10 credits)
- 1999-2006. Software Measurement and Testing (MSc/MEng, developed from scratch, 10 credits MSc/MEng)
- 2005-present. Topics in Privacy and Security (10 credits, since 2005, originally shared, now just me)
- 2004-present. Cryptography, Attacks and Countermeasures (3<sup>rd</sup> year, 10 credits, developed from scratch, UG 3<sup>rd</sup> year)
- 2006-present. Evolutionary Computation (MSc NC, 10 credits, developed from scratch)

**Tutorials and Supervisions..** Various tutorials (1<sup>st</sup> year, 2<sup>nd</sup> year pastoral, 3<sup>rd</sup> year, 4<sup>th</sup> year. MSc NC, MSc SCSE and MSc SWE project supervisions)

2007. Project Student Mark read won SET IT student of the year.

## **D ADMINISTRATION AND OTHER SUPPORT**

1994 – 1999. Secretary to the SCSE Industrial Advisory Board

1994 – 1999. Secretary to the SCSE Board of Examiners

2001-2006. Secretary to the Board of Examiners in Computer Science (all courses)

2006-2008. Chairman of the Board of Examiners in Computer Science (all courses)

1996-2000. European visitor for sandwich placements. (Visiting students with industrial placement year in Greece, Switzerland, and Germany).

**Peer Observer of Teaching:** Observer as part of teaching monitoring.

**UCAS voice of the department.** I have been the voice of the Department when answering student questions in plenary session for our UCAS days. (We have a team of two academics, one collating questions, one answering (me), with typically three students to provide student views.) Usually I also give the summary research talk as part of these days.

**Interviewer.** For all undergraduate courses. Also for MSc SCSE, MSc SWE, MSc NC.

### **Outreach and Wider Promotion:**

- Lecturer on the Department’s “HeadStart” week-long university experience week, organised in conjunction with the Royal Academy of Engineering. (I lecture on security and cryptography.)
- 1996. Study in Britain (sponsored by the British Council) delegation to Hong Kong (one of two York delegates).
- 1998. Study in Britain (sponsored by the British Council) delegation to Hong Kong (one of two York delegates).

### **Previous External Examiner Roles**

- 2006-2010: King’s College London (UG CS and Software Engineering courses)
- 2004-2009 Open University: Information Security Management (M886).
- 2007-2010: University of Newcastle. MSc in Security and Resilience.

### **Current External Examiner Roles**

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- 2007- 2011: University of Sheffield (BSc/MEng CS and Software Engineering courses).
- 2010- : Imperial College (UG, MEng)
- 2010 – : Brunel (UG)