

CURRICULUM VITAE

NAME Dr. Harini Kulatunga
INSTITUTE Department of Computing, Imperial College London, 180 Queen's Gate, South Kensington Campus, London SW7 2AZ.
EMAIL <http://www.doc.ic.ac.uk/~hkulatun>
TELEPHONE 07956009980
NATIONALITY Sri Lankan (spouse of an EU national, work permit not required)

EDUCATION

- 2006/05/22 **Ph.D.**, in Department of Automatic Control and Systems Engineering, University of Sheffield, United Kingdom. **Thesis Title** – Multiple Model based Estimation and Detection in Wireless Communication Systems.
External examiner – Prof. Simon Godsill, Cambridge University Signal Processing Laboratory.
- 1996/01 – 1999/12 **Bachelor of Engineering, Electrical and Electronics**. Birla Institute of Technology, India. First Class with Distinction. **Final year project** – Edge Detection using Neural Networks.
- 1993/08 **G.C.E. Advanced Level Examination**, Ministry of Education and Higher Education, Government of Sri Lanka. Pure Mathematics – Grade A, Applied Mathematics – Grade A, Physics – Grade B, Chemistry – Grade B. Average - 82%.

AWARDS

- 2001/09 – 2004/09 University Fee Bursary, University of Sheffield.
- 2001/09 – 2004/09 Grant awarded by the Dept. of Automatic Control and Systems Engineering, University of Sheffield, UK.
- 1996/01 – 1999/12 Scholarship awarded by the Government of India for B.Eng. (EEE) at Birla Institute of Technology, India. The selection process was based on a country wide application process and a group interview.
- 1995/09 – 1995/12 Mahapola Merit Scholarship for B.Sc. (Engineering 1), University of Moratuwa, Sri Lanka.

POSITIONS

- 2006/07 – present Post Doctoral Research Associate, Analysis, Engineering, Simulation & Optimization of Performance (AESOP) Group, Department of Computing, Imperial College London.
- 2005/11 – 2006/07 Research Assistant, AESOP Group, Department of Computing, Imperial College London.
- 2001/10 – 2002/10 Student Ambassador, Sheffield University, The Early Outreach Scheme.
- 2000/06 – 2001/09 Territory Sales Representative, IBM World Trade Corporation, Sri Lanka.
- 2000/03 – 2001/06 Systems Software Specialist, IBM World Trade Corporation, Sri Lanka.
- 1998/05 – 1998/08 Industrial Placement. Sri Lanka Telecom, Sri Lanka.
- 1997/12 – 1998/01 Industrial Placement at Suntel (Pvt) Limited, Sri Lanka, Wireless Local Loop (WLL) operator.
- 1994/02 – 1995/05 Analyst Programmer, Chart Software House (Pvt.) Limited, Sri Lanka.

PRINCIPAL RESEARCH AND TEACHING INTERESTS

Stochastic Modelling and Optimisation
Formal methods in Performance Evaluation
Computer and Communication Networks
Parallel and Distributed Computing

Bayesian Statistical Signal Processing
Multiple Model Theory
 H_∞ - based Robust Signal Estimation
Wireless Systems – CDMA, OFDM

TEACHING AND RELATED EXPERIENCE

Teaching

October 2006 – present

Urop project supervision in Signal Detection in OFDM Wireless Systems
Undergraduate project support in Grid Computing.
Tutorial lectures in Mathematical Methods (1st year).
Tutorial support in Parallel Algorithms (4th year/ M.Sc.).
Tutorial support in Advanced Operations Research.
Marking of assignments in Mathematical Methods, Parallel Algorithms, Advance Operations Research.

October 2001 – November 2005

Undergraduate project supervision in Wireless Communication.
Lecturing for tutorial groups in Nonlinear Systems and State Space Control Design.
Lecturing for laboratory groups in State-Space Control Design for masters students.
Undergraduate examination paper marking in Numerical Methods, Control System Design.

Talks

“Research Challenges in Future Health Care Systems”, September 2008, eHealth 2008, London, UK.

“Optimal State Estimation: Kalman Filtering Approach”, August 2007, AESOP Meeting, Department of Computing, Imperial College London.

“Space-Time Block Coding: Joint Detection and Channel Estimation using Multiple Model Theory”, July 2006, Seventh IEEE International Workshop on Signal Processing Advances in Wireless Communications, Cannes, France.

“Robust equalization using multiple H_∞ filters”, at the IMA Conference on Mathematics in Signal Processing VI, 2004 Cirencester, UK.

“Adaptive Joint Detection and Estimation in MIMO systems: Hybrid Systems Approach”, at the IMA Conference on Mathematics in Signal Processing VI, 2004 Cirencester, UK.

“Multiple models for Blind Multi-user Detection in MIMO DS/CDMA systems”, at the symposium on Signal Processing for Communications, IEEE GLOBECOM 2003, San Francisco, CA.

PROFESSIONAL ACTIVITIES

Paper reviewer for the journals,
IEEE Transactions in Signal Processing and IEEE Signal Processing Letters
IEEE Transactions in Vehicular Technology
IEEE Transactions in Wireless Communication
IEEE Transactions in Neural Networks
IET Communications

Paper reviewer for performance related conferences, namely,
European Performance Evaluation Workshop (EPEW)
IEEE International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS)
International Conference on Quantitative Evaluation of SysTems (QEST)

WORK SKILLS

MATLAB Programming, C/C++/Java Programming.
Sun Grid Engine 6.0, DRM package, DRMAA and MPI.
Competence in Windows/Linux/Unix OS.
Desktop publishing - MS Office, Corel Draw, Lotus WordPro, LaTeX.
Spreadsheets – MS Excel, Lotus123

PERSONAL INTERESTS

Reading - English Classical Literature, Russian Classics translated to English/Sinhala.
Sketching, Painting
Travelling – Recent trips to Santiago de Compostela, Spain and Valenca, Portugal. Have also visited parts of Scotland and Wales, Kathmandu and Lumbini in Nepal, parts of India (Jaipur, Agra, Bodh Gaya, Mysoor, Chennai) and Kuala Lumpur in Malaysia.

LANGUAGES

Sinhala – Fluent, native speaker. English – Fluent. Hindi – Notions. Spanish – Notions.

REFEREES

Provided on request.