

Summary Bio Profile - Professor Gerard Parr- University of Ulster, Northern Ireland

Gerard Parr holds the Full Chair in Telecommunications Engineering and is a Member of the Computer Science Research Institute in the Faculty of Computing & Engineering at the University of Ulster in Coleraine, Northern Ireland. He holds a PhD in Self Stabilizing Protocols and has published widely in international peer-reviewed journals, including Communications of the ACM, IEEE Transactions on Network and Service Management, LNCS Springer-Verlag, Parallel and Intl Jrn Distributed Systems and Networks, Software Concepts and Tools, Intl Journal of Network Management and in major IEEE conferences including IFIP/IEEE MMNS, IEEE WCNC, IEEE ICC and IEEE MILCOM. Areas of research within the group include self-stabilizing protocols, interplanetary network protocols, real-time network management systems, CNNs and intelligent mobile agents in xDSL and SNMP, real-time data analytics for NMS, Energy Aware Infrastructure, Resource Management Protocols, Applications Performance Management in Virtualised Environments, Bandwidth provision over SONET/SDH in the presence of chaotic impulses and fuzzy inference systems for multicriteria handoff in tactical communications, Wireless Sensor Clouds, Disaster Response Communications and Cloud Computing. Currently he is supervising numerous PhD and MSc students ranging in topics from proactive network management, mobile agent security, multimedia event suppression for wireless devices, delay-sensitive protocols, WiMAX-EPON integration, ad-hoc wireless protocols to storage resource management and SOAs in GRIDs and energy-aware autonomic networking. He has extensive experience of managing government and industry-sponsored research contracts and has developed a close working relationship with a number of major ICT companies including Sun Microsystems, Oracle, Cisco, BT, NorTel, SAP, Ericsson, InfoSys, Wipro, Sasken, Tejas, Fujitsu Telecommunications and Rockwell Inc. He has attracted several £millions of external research and commercial funding and has advised governments on the allocation of funding to projects valued in total of approximately £600 million. He also has significant commercial experience as a founding Executive Director of the campus spin-off company (formerly Causeway Data Communications Ltd, now GeoPii) which is based in Coleraine and holds a number of international patents. The company specialises in Spatial Data Management software for Computer Assisted Mass Appraisal, in particular a product called SpatalestTM. More details of the company can be viewed at <http://www.geopii.com/>. Professor Parr is a member of the UK Engineering and Physical Sciences Research Council Expert Peer Review College (Communications Panel), and was a past member of previous EPSRC JIF Panels. He was invited to become a member of the Telecommunications Regulator in the Republic of Ireland (COMREG) Forward Looking Panel in the Republic of Ireland.. He was previously invited to become an Expert Evaluator to the EU's FP6 for IST:GRID Technologies and Satellite Communications. He worked previously with one of the founding fathers of the Internet (Professor Jon Postel) as a Visiting Research Scientist at the USC Information Sciences Institute in Marina Del Rey, Los Angeles on US-DARPA funded research projects into Fault-Tolerant and Self-stabilizing Protocols. He was the Senior Guest Editor for a Special Issue of the premier International Journal of Computer Networks by Elsevier which was devoted to Advances in Military Communications Technologies and Systems. He was joined on the panel by representatives from Boeing (USA), US Air Force Research Laboratories (New York), QinetiQ (Farnborough UK) and NATO. In recent years he has been invited to become a Member of the Technical Committees of the IEEE International Workshop on Policies for Distributed Systems, IEEE (Military Communications) MILCOM, IFIP/IEEE MMNS(Management of Multimedia Networks and Services) and IEEE MANWEEK. In addition, he has been a member of the TPC for IEEE CCNC and IEEE WCNC. He was appointed as Member of the Northern Ireland Advisory Committee for OFCOM UK (the telecommunications/media regulator) which reports to the main board of OFCOM. He acts as a Technical Expert Assessor for Science Foundation Ireland and is also a Technical Advisor for ICT to the UK government through Invest Northern Ireland. During 2008 he acted as a Technical Advisor to Project KELVIN funded by the Republic's Department of Enterprise, Trade and Employment and the North's Department of Enterprise, Trade and Investment-DETI. He is an invited Member of the Editorial Panel for the U.S. International Journal of Aerospace Computing, Information, and Communication which is owned by the American Institute of Aeronautics and Astronautics. Previously he was invited to become a member of the world's first EPSRC UK-China Research Network for Manufacturing, Automation and Computing with 16 UK Universities and 32 of the top Universities in China. In addition he is a founding member of a recently funded EPSRC Research Network on Systems Biology which will address key challenges from the Engineering- Life Sciences Interface. He was successful in obtaining funding for a major EU Marie Curie project with the lead industrial partner Ericsson Research Ireland which will be devoted to Distributed Intelligent EcoSystems for Telecommunications Network Management (fixed & wireless). The project has employed ten Postdocs in EE/CS for 4 years and Gerard is the Technical Consultant to the initiative. Members of the Ulster research group attended IEEE Cluster Computing and GRID and also the Global Grid Forum in Korea as Distinguished Scholars. He was appointed as an Expert Evaluator for the EU FP7 Future & Emerging Technologies Programme. He acts as an MSc/PhD External Examiner in CS/EE for University College London, Trinity College Dublin, Xiamen University, P.R. China, Queen's University Belfast, Cardiff University, Queen Mary University London, Indian Institute of Technology -IIT Madras and the University of Plymouth. His academic research collaborations include MIT, Georgia Institute of Technology, USC-ISI Los Angeles, UCL, Southampton, Surrey, QMUL, Oxford, St Andrews, Lancaster and Cambridge, Beijing University of Posts & Telecommunications (BUPT) and Indian Institutes of Technology in Mumbai, Madras, Kanpur, Hyderabad, Delhi and IIScBangalore. Previously, a team of his graduate PhD researchers were accepted for Research Internships at Cisco Labs in San Jose and North Carolina. At present he is acting as the lead Guest Editor for a Special Issue of the Journal of Aerospace Computing Information and Communications (JACIC) in the area of First-Responder Technologies for the Global Aerospace Industry. He was appointed as a Visiting Professor to the SFI Centre for Telecommunications and Value Chain Research at Trinity College Dublin in 2006. In recent years he has been successful in attracting major EPSRC research funding for a project in Sensing Unmanned Aerial Vehicles that will involve colleagues from UCL, Oxford, UK Home Office, Thales, BAE Systems and Boeing USA. He has been instrumental in the development of a consortium of leading UK-India academia and industry (led by BT Innovate) to create the first India-UK Advanced Technology Centre (IU-ATC- <http://www.iu-atc.com>) of Excellence in Next Generation Networks Systems and Services. This initiative has integrated EPSRC INTERACT 5 and UKIERI-DST projects. Phase 1 of this major 5-year initiative has received initial funding and support to the tune of £9.2M in Spring 2009 from EPSRC, Indian-DST and the consortium partners. Parr was recently invited to become a Member of the UK Government Engineering and Physical Sciences Research Council ICT Strategic Advisory Team. He has been appointed as an International Scientific Advisor to ETISALAT-BT Innovation Centre in UAE and also the UK EPSRC National Centre for Doctoral Training in Communications Engineering at the University of Bristol. He is currently acting as Senior Guest Editor for IEEE JSAC for a Special Issue on Communications Dynamics in UAVs.