

Activity & Progress Reporting

Section AGM 22 April 2022

1. Chapter/Affinity Group:	Industry Applications Society Chapter
2. Committee Members	Chair: Amir Hussain Co-Chair: Mike Grimble Secretary: Kamran Farooq Deputy Secretary: Mandar Gogate Professional Activities & Links Co-ordinator: Keshav Dahal Industry Liaison: Reza Katebi Publicity Chair: Andrzej Ordys Student Activities Liaison: Kia Dashtipour
3. Reporting Officer:	Amir Hussain
4. Overview of current plan and activities:	<p>We organised more than 15 events over the past 5 months covering various topics such as cognitive systems, signal processing, cyber security, IoT, healthcare and assistive healthcare technologies and applications. The list of events is given below:</p> <ol style="list-style-type: none"> 1. Seminar at University of Glasgow on “Advances in electrical stimulation and neuromodulation” Yazdi Al'Joboori, Sean Doherty and Anne Vanhoostenberghe, University College London, 12 Feb 2022 2. Seminar at University of Glasgow on “Electromagnetic Acoustic Transducers (EMATs) - from the lab to industry”, Prof Dixon, 22 Feb 2022. 3. Workshop at Edinburgh Napier University, “Transformative cognitively-inspired multi-modal hearing-aids (COG-MHEAR)” Dr Adeel Ahsan, University of Wolverhampton, Edinburgh, 23 Feb 4. Workshop at Edinburgh Napier University, “Privacy-preserving digital contact tracing for infectious diseases” Dr. Lei Zhang, University of Glasgow, 20 Jan 2022 5. Workshop at Edinburgh Napier University, “EPSRC programme grant on mobile diagnostics for low resource settings”, Professor Jon Cooper, University of Glasgow, 20 Jan 2022 6. Workshop at Edinburgh Napier University, “Privacy-preserving digital contact tracing for infectious diseases” Dr. Lei Zhang, University of Glasgow, 20 Jan 2022



United Kingdom and Ireland Section

	<ol style="list-style-type: none">7. Workshop at Edinburgh Napier University, "Healthcare QUEST: EPSRC programme grant on mobile diagnostics for low resource settings", Professor Jon Cooper, University of Glasgow, 20 Jan 20228. Workshop at Edinburgh Napier University, "Robust Audio-Visual Speech Enhancement in Real-world Scenarios", Prof Yu Tsao, Academia Sinica, Taiwan, 9 Feb 20229. Workshop at Edinburgh Napier University, "FPGAs for Edge-AI", Prof Hadi Larijani, Glasgow Caledonian University, 9 Feb 202210. Workshop at Edinburgh Napier University, "Hearing-aid signal processing: Challenges and Opportunities", Dr Peter Derleth, Sonova, 16 March 202211. Workshop at Edinburgh Napier University, "CCi-MOBILE: Design and evaluation of a Cochlear-Implant and Hearing-Aid Research Platform for Speech Scientists and Engineers", Prof John Hansen, Texas University, 20 April 202212. Seminar at the University of Stirling on "Computational Intelligence methods for Bioinformatics and Biostatistics", 08/01/202213. Seminar at the University of Stirling on "Towards constructing a mathematically rigorous framework for modelling evolutionary fitness", by Dr Andrew Morozov, 16 March 202214. Seminar at the University of Stirling on "Energy transition", Professor Peter Newell, 30 March 202215. Seminar at the University of Stirling on "Negotiating the object of conservation: significance, faith and care at Glasgow Cathedral - Heritage research seminar", 22 April 202216. Seminar at University of Stirling on "Genomic Prediction using Evolutionary Computation, Machine Learning and Traditional Statistical Approaches", Dr Ken Reid, 25 Feb 202217. Seminar at University of Stirling on "Modelling and Optimisation of Aircraft Ground Movement for Greener, Faster Airport Operations" Dr Sandy Brownlee, 16 March 202218. Seminar at University of Stirling on "Advanced time-resolved imaging and spectroscopy techniques for life science", Dr David Li, 1st April 2022
<p>5. Key Achievements and member value/services to date:</p>	
<p>6. Key Challenges:</p>	-



United Kingdom and Ireland Section

7. Deficits/Required Resources:	-
8. Actions/Support requested from the Section:	-
9. Action Plan:	<p>We are planning to organise at least 8-10 events during the rest of this year, including in collaboration with other IEEE UK&RI chapters. The events include:</p> <ol style="list-style-type: none">1. The 2022 5th IEEE Conference on Dependable and Secure Computing (IEEE DSC 2022) – Edinburgh (22-24 June)2. 5th International Paper/Poster Competition in Cybersecurity Sponsored by SICSA – Edinburgh (22 June) (https://attend.ieee.org/dsc-2022/sicsa-event/)3. 44th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) 2022 Workshop on “Challenges and Opportunities in Developing Multi-Modal, Transformative Hearing Assistive Technologies”, Glasgow, 11 July 20224. Seminar at University of Stirling on “Understanding the Evolution of Cognition with Structural and Information-Theory Based Analysis”, Clifford Bohm, 11 May 20225. Seminar at University of Stirling on “Neuroevolution Trajectories and Landscapes”, 18 May 2022.6. SPECS 2022 (Sheffield Power and Energy Conversion Symposium 2022), July 27-29th, 2022