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Projects

Advanced Cyber-Security Simulation Platform For Preparedness Training in Aviation, Naval and Powergrid environments (FORESIGHT) (H2020 SC7)

Bellekens, X. (Principal Investigator), Atkinson, R. (Co-investigator) & Tachtatzis, C. (Co-investigator)
European Commission - Horizon Europe + H2020
1/10/19 → 30/09/22

Applicability of Localised Heating for metal forging

Andonovic, I. (Principal Investigator), Atkinson, R. (Research Co-investigator), Harle, D. (Research Co-investigator) & Tachtatzis, C. (Research Co-investigator)
EPSRC (Engineering and Physical Sciences Research Council)
1/02/15 → 30/09/15

Asbestos Fibre Counting (Ethos / TDL)

Tachtatzis, C. (Principal Investigator), Cardona Amengual, J. (Co-investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Cleary, A. (Co-investigator) & Michie, C. (Co-investigator)
1/02/18 → 31/01/19

Asset Analytics Automation

Michie, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator) & Tachtatzis, C. (Co-investigator)
Aggreko PLC, DATALAB (SFC Innovation Centre, administered by the University of Edinburgh)
4/01/16 → 3/01/17

Automatic annotation of subsea survey video

Tachtatzis, C. (Principal Investigator), Cleary, A. (Co-investigator), Michie, C. (Co-investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator) & Hamilton, A. (Research Co-investigator)
1/03/17 → 31/01/18

CAUDATA : Scratch and Rebuild Architecture

Tachtatzis, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Bellekens, X. (Co-investigator) & Ben Farah, M. L. (Research Co-investigator)
Innovate UK
1/04/21 → 31/05/21

CONSERVE: Contingency Operations for Strategic Infrastructure and the Vulnerable

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Bellingham, R. (Co-investigator) & Tachtatzis, C. (Research Co-investigator)
Innovate UK
1/01/16 → 30/06/17

Decision Support for Investment & Economic Development within Sparse Data Markets

Tachtatzis, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Cardona Amengual, J. (Co-investigator), Hamilton, A. (Co-investigator), Macdonald, M. (Co-investigator) & Michie, C. (Co-investigator)
Imrandd Ltd, DATALAB (SFC Innovation Centre, administered by the University of Edinburgh)
11/02/22 → 10/02/23

DEFGRID - The Utility DSbD Demonstrator (ISCF Digital Security by Design)

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Coffele, F. (Co-investigator), Irvine, J. (Co-investigator), Michie, C. (Co-investigator) & Tachtatzis, C. (Co-investigator)

Innovate UK

1/02/22 → 31/01/25

Development & Commercialisation of the world's first technology enabling 100% of Post Consumer recycled bottles (rPET), to be remanufactured into "as new", PET Bottles :PET-Yield

Atkinson, R. (Principal Investigator), Cardona Amengual, J. (Co-investigator), Liggat, J. (Co-investigator), Nordon, A. (Co-investigator), Tachtatzis, C. (Co-investigator), Wagner, B. (Co-investigator) & Wilson, J. (Co-investigator)

EnviroPET Ltd

1/09/22 → 31/08/23

Digital Dairy Value-Chain for South-West Scotland and Cumbria (Strength in Places Fund)

Michie, C. (Principal Investigator), Wagner, B. (Academic), Wilson, J. (Academic), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Bellekens, X. (Co-investigator), Galloway, S. (Co-investigator), Kelly, N. (Co-investigator), Lengden, M. (Co-investigator), Revie, M. (Co-investigator), Stewart, R. (Co-investigator), Tachtatzis, C. (Co-investigator) & Ward, A. (Co-investigator)

Innovate UK

1/02/22 → 31/01/27

Doctoral Training Partnership 2020-2021 University of Strathclyde | MacKinnon, Christopher

Atkinson, R. (Principal Investigator), Tachtatzis, C. (Co-investigator) & MacKinnon, C. (Research Co-investigator)

EPSRC (Engineering and Physical Sciences Research Council)

1/10/20 → 1/10/23

EPSRC Centre for Doctoral Training in Future Power Networks and Smart Grids | Dickinson, Carl

Di Caterina, G. (Principal Investigator), Atkinson, R. (Co-investigator) & Dickinson, C. (Research Co-investigator)

EPSRC (Engineering and Physical Sciences Research Council)

1/10/16 → 1/01/21

EPSRC IAA: Udersea Cable Data Analysis

Atkinson, R. (Co-investigator)

EPSRC (Engineering and Physical Sciences Research Council)

1/04/22 → 31/03/26

Fostering Precision Agriculture and Livestock Farming through Secure Access to Large-Scale HPC-Enabled Virtual Industrial Experimentation Environment Empowering Scalable Big Data Analytics (H2020-ICT-2018-2020) (CYBELE)

Tachtatzis, C. (Principal Investigator), Cardona Amengual, J. (Academic), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator) & Michie, C. (Co-investigator)

European Commission - Horizon Europe + H2020

1/01/19 → 31/12/21

Improving the Safety, Reliability, and Efficiency of Cargo Transportation using Deep Learning Computer Vision

Cardona Amengual, J. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Michie, C. (Co-investigator) & Tachtatzis, C. (Co-investigator)

1/05/19 → 17/08/19

Innovative Composite Cure Tool

Tachtatzis, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator) & Harle, D. (Co-investigator)

Spirit Aerosystems (Europe) Ltd

1/12/13 → 30/11/14

Internet of Things for Industrial Devices

Ugwuanyi, S. O. (Principal Investigator), Irvine, J. (Co-investigator) & Atkinson, R. (Co-investigator)

12/12/17 → 26/02/23

KTP-Cisco

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Harle, D. (Co-investigator) & Tachtatzis, C. (Co-investigator)
KTP Govt (TSB), Cisco Systems
1/02/14 → 31/01/16

KTP - Fathom Systems

Tachtatzis, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Cleary, A. (Co-investigator) & Michie, C. (Co-investigator)
Fathom Systems Limited, KTP Govt (TSB)
4/09/17 → 3/09/20

KTP-Spartan

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Bellekens, X. (Co-investigator) & Tachtatzis, C. (Co-investigator)
Spartan Solutions Ltd, KTP Govt (Momenta)
1/02/20 → 31/07/22

KTP-Spartan / R190901-202

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Bellekens, X. (Co-investigator) & Tachtatzis, C. (Co-investigator)
KTP Govt (Momenta)
1/02/20 → 31/07/22

LaaS: Light as a Service (LAAS)

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Harle, D. (Co-investigator) & Michie, C. (Co-investigator)
Technology Strategy Board TSB
1/10/13 → 30/09/15

Lupovis: A Wolf In Sheep's Clothing (Cyber Security ASAP)

Bellekens, X. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator) & Tachtatzis, C. (Co-investigator)
Innovate UK
1/04/20 → 28/02/21

Lupovis - 'A Wolf in Sheep's Clothing'. Deception Response HGSP

Bellekens, X. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator) & Tachtatzis, C. (Co-investigator)
Scottish Enterprise
1/10/20 → 31/03/21

Membrane performance study with GSK

Cleary, A. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Michie, C. (Co-investigator) & Tachtatzis, C. (Co-investigator)
Glaxo Smithkline (UK)
1/07/16 → 31/03/18

N-Sea Phase 2: Automatic Annotation of Subsea Survey Video

Tachtatzis, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Di Caterina, G. (Co-investigator) & Michie, C. (Co-investigator)
N-Sea Offshore Ltd, OGIC Oil and Gas Innovation Centre (SFC Innovation Centre, Administered via HEI)
1/06/18 → 30/05/20

Operation & Maintenance Decision Support Analytics for Offshore Wind Generation

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Michie, C. (Co-investigator), Galloway, S. (Co-investigator) & Stephen, B. (Co-investigator)

1/04/13 → 1/10/13

Predictive maintenance for offshore wind turbines

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Cardona Amengual, J. (Co-investigator), Carroll, J. (Co-investigator), McMillan, D. (Co-investigator) & Tachtatzis, C. (Co-investigator)
Spartan Solutions Ltd, DATALAB (SFC Innovation Centre, administered by the University of Edinburgh)
1/05/22 → 31/10/22

Scalable Radiometric Wireless Sensor Network for Partial Discharge Monitoring in the Future Smart Grid

Atkinson, R. (Principal Investigator), Judd, M. (Co-investigator) & Soraghan, J. (Co-investigator)
EPSRC (Engineering and Physical Sciences Research Council)
3/04/13 → 1/04/18

Secure High availability Avionics Wireless Networks (SHAWN)

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator), Harle, D. (Co-investigator) & Michie, C. (Co-investigator)
Technology Strategy Board TSB
1/01/14 → 30/06/16

Smart Agriculture with Intelligent Transportation Systems for Sustainable Future Cities (Newton Fund - Institutional Links)

Andonovic, I. (Principal Investigator), Atkinson, R. (Co-investigator), Michie, C. (Co-investigator) & Tachtatzis, C. (Co-investigator)
British Council
1/04/15 → 31/03/16

Smart Tooling Spirit Phase 3

Tachtatzis, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Cleary, A. (Co-investigator) & Michie, C. (Co-investigator)
Spirit Aerosystems (Europe) Ltd
3/07/17 → 31/08/18

Spirit Tool Demonstration

Tachtatzis, C. (Principal Investigator), Andonovic, I. (Co-investigator), Atkinson, R. (Co-investigator), Cleary, A. (Co-investigator) & Michie, C. (Co-investigator)
Spirit Aerosystems (Europe) Ltd
1/02/17 → 31/03/17

Transforming Oilfield Equipment Performance In Mature Basins

Atkinson, R. (Principal Investigator), Andonovic, I. (Co-investigator) & Tachtatzis, C. (Co-investigator)
Net Zero Technology Centre Limited (formerly the Oil & Gas Technology Centre OGTC)
13/08/18 → 12/07/19

Wedagate: Wireless Data Acquisition in Gas Turbine Engine Testing

Glover, I. (Principal Investigator) & Atkinson, R. (Co-investigator)
Technology Strategy Board TSB
1/11/08 → 31/10/11

Research output

Augmenting cattle tracking efficiency through monocular depth estimation

Dickson, L. T., Davison, C., Michie, C., McRobert, E., Atkinson, R., Andonovic, I., Ferguson, H., Dewhurst, R., Briddock, R., Brooking, M., Pavlovic, D., Marko, O., Crnojevic, V. & Tachtatzis, C., 28 Sept 2024. 5 p.

Neural knitrworks: patched neural implicit representation networks

Czerkawski, M., Cardona, J., Atkinson, R., Michie, C., Andonovic, I., Clemente, C. & Tachtatzis, C., 31 Jul 2024, In: Pattern Recognition. 151, 9 p., 110378.

Multi-modal convolutional parameterisation network for guided image inverse problems

Czerkawski, M., Upadhyay, P., Davison, C., Atkinson, R., Michie, C., Andonovic, I., Macdonald, M., Cardona, J. & Tachtatzis, C., 12 Mar 2024, In: *Journal of Imaging*. 10, 3, 23 p., 69.

Designing a new search space for multivariate time-series neural architecture search

MacKinnon, C. & Atkinson, R., 20 Dec 2023, *Advanced Analytics and Learning on Temporal Data: 8th ECML PKDD Workshop*. Ifrim, G., Tavenard, R., Bagnall, A., Schaefer, P., Malinowski, S., Guyet, T. & Lemaire, V. (eds.). Cham, Switzerland: Springer, p. 190–204 15 p. (Lecture Notes in Computer Science; vol. 14343).

PCA-enhanced methodology for the identification of partial discharge locations

Iorkyase, E. T., Tachtatzis, C. & Atkinson, R., 11 Sept 2023, In: *Energies*. 16, 18, 16 p., 6532.

SatelliteCloudGenerator: controllable cloud and shadow synthesis for multi-spectral optical satellite images

Czerkawski, M., Atkinson, R., Michie, C. & Tachtatzis, C., 23 Aug 2023, In: *Remote Sensing*. 15, 17, 23 p., 4138.

Detecting cloud presence in satellite images using the RGB-based CLIP vision-language model

Czerkawski, M., Atkinson, R. & Tachtatzis, C., 21 Jul 2023. 3 p.

Specialized path-based technique to test Internet of Things system functionality under limited network connectivity

Klima, M., Bureš, M., Ahmed, B. S., Bellekens, X., Atkinson, R., Tachtatzis, C. & Herout, P., 1 Jul 2023, In: *Internet of Things*. 22, 27 p., 100706.

Correction: Czerkawski et al. Deep internal learning for inpainting of cloud-affected regions in satellite imagery. *Remote Sens.* 2022, 14, 1342

Czerkawski, M., Upadhyay, P., Davison, C., Werkmeister, A., Cardona, J., Atkinson, R., Michie, C., Andonovic, I., Macdonald, M. & Tachtatzis, C., 14 Dec 2022, (E-pub ahead of print) In: *Remote Sensing*. 14, 24, 4 p., 6324.

Leveraging Siamese networks for one-shot intrusion detection model

Hindy, H., Tachtatzis, C., Atkinson, R., Brosset, D., Bures, M., Andonovic, I., Michie, C. & Bellekens, X., 5 Nov 2022, In: *Journal of Intelligent Information Systems*. 60, 2, p. 407-436 30 p.

LoRaWAN-implemented node localisation in a sandstorm environment based on received signal strength indicator

Aqeel, I., Iorkyase, E., Zangoti, H., Tachtatzis, C., Atkinson, R. & Andonovic, I., 15 Sept 2022, (E-pub ahead of print) In: *IET Wireless Sensor Systems*. 13, 4, p. 117-132 16 p.

Effect of oscillatory flow conditions on crystalliser fouling investigated through non-invasive imaging

Sheridan, R., Cardona, J., Tachtatzis, C., Chen, Y.-C., Cleary, A., Briggs, N. E. B., Florence, A., Atkinson, R., Michie, C., Andonovic, I. & Sefcik, J., 28 Apr 2022, In: *Chemical Engineering Science*. 252, 117188.

Behavioural classification of cattle using neck-mounted accelerometer-equipped collars

Pavlovic, D., Czerkawski, M., Davison, C., Marko, O., Michie, C., Atkinson, R., Crnojevic, V., Andonovic, I., Rajovic, V., Kvascev, G. & Tachtatzis, C., 17 Mar 2022, In: *Sensors*. 22, 6, 18 p., 2323.

Cyber-security challenges in aviation industry: a review of current and future trends

Ukwandu, E., Ben-Farah, M. A., Hindy, H., Bures, M., Atkinson, R., Tachtatzis, C., Andonovic, I. & Bellekens, X., 10 Mar 2022, In: *Information*. 13, 3, 22 p., 146.

Deep internal learning for inpainting of cloud-affected regions in satellite imagery

Czerkawski, M., Upadhyay, P., Davison, C., Werkmeister, A., Cardona, J., Atkinson, R., Michie, C., Andonovic, I., Macdonald, M. & Tachtatzis, C., 10 Mar 2022, In: *Remote Sensing*. 14, 6, 18 p., 1342.

A flexible multi-temporal and multi-modal framework for Sentinel-1 and Sentinel-2 analysis ready data

Upadhyay, P., Czerkawski, M., Davison, C., Cardona, J., Macdonald, M., Andonovic, I., Michie, C., Atkinson, R., Papadopoulou, N., Nikas, K. & Tachtatzis, C., 24 Feb 2022, In: *Remote Sensing*. 14, 5, 20 p., 1120.

Neural weight step video compression

Czerkawski, M., Cardona, J., Atkinson, R., Michie, C., Andonovic, I., Clemente, C. & Tachtatzis, C., 13 Dec 2021. 8 p.

A comparison of the performance of 2D and 3D convolutional neural networks for subsea survey video classification

Stamoulakatos, A., Cardona, J., Michie, C., Andonovic, I., Lazaridis, P., Bellekens, X., Atkinson, R., Hossain, M. M. & Tachtatzis, C., 23 Sept 2021. 10 p.

Non-invasive diver respiration rate monitoring in hyperbaric lifeboat environments using short-range radar

Czerkawski, M., Stewart, F., Ilioudis, C., Michie, C., Andonovic, I., Atkinson, R., Coull, M., Sandilands, D., Kerr, G., Clemente, C. & Tachtatzis, C., 23 Sept 2021. 5 p.

Classification of cattle behaviours using neck-mounted accelerometer-equipped collars and convolutional neural networks

Pavlovic, D., Davison, C., Hamilton, A., Marko, O., Atkinson, R., Michie, C., Crnojević, V., Andonovic, I., Bellekens, X. & Tachtatzis, C., 12 Jun 2021, In: *Sensors*. 21, 12, 18 p., 4050.

Developing a Siamese network for intrusion detection systems

Hindy, H., Tachtatzis, C., Atkinson, R., Bayne, E. & Bellekens, X., 26 Apr 2021, *EuroMLSys '21: Proceedings of the 1st Workshop on Machine Learning and Systems*. New York, NY, p. 120–126 7 p.

Utilising flow aggregation to classify benign imitating attacks

Hindy, H., Atkinson, R., Tachtatzis, C., Bayne, E., Bureš, M. & Bellekens, X., 4 Mar 2021, In: *Sensors*. 21, 5, 17 p., 1761.

A review of techniques for RSS-based radiometric partial discharge localization

Upton, D. W., Mistry, K. K., Mather, P. J., Zaharis, Z. D., Atkinson, R. C., Tachtatzis, C. & Lazaridis, P. I., 29 Jan 2021, In: *Sensors*. 21, 3, 21 p., 909.

Machine learning based IoT Intrusion Detection System: an MQTT case study (MQTT-IoT-IDS2020 Dataset)

Hindy, H., Bayne, E., Bures, M., Atkinson, R., Tachtatzis, C. & Bellekens, X., 5 Jan 2021, *Selected Papers from the 12th International Networking Conference, INC 2020*. Ghita, B. & Shiaeles, S. (eds.). Cham, Switzerland: Springer, p. 73-84 12 p. (Lecture Notes in Networks and Systems, LNNS; vol. 180).

Composite laminate delamination detection using transient thermal conduction profiles and machine learning based data analysis

Gillespie, D. I., Hamilton, A. W., Atkinson, R. C., Bellekens, X., Michie, C., Andonovic, I. & Tachtatzis, C., 17 Dec 2020, In: *Sensors*. 20, 24, 19 p., 7227.

A review of cyber-ranges and test-beds: current and future trends

Ukwandu, E., Ben Farah, M. A., Hindy, H., Brosset, D., Kavallieros, D., Atkinson, R., Tachtatzis, C., Bureš, M., Andonovic, I. & Bellekens, X., 13 Dec 2020, In: *Sensors*. 20, 24, 36 p., 7148.

Classification of cattle behaviour using convolutional neural networks

Pavlovic, D., Tachtatzis, C., Hamilton, A., Marko, O., Atkinson, R., Davison, C., Michie, C., Crnojevic, V. & Andonovic, I., 4 Dec 2020. 1 p.

Defect detection in aerospace sandwich composite panels using conductive thermography and contact sensors

Gillespie, D. I., Hamilton, A. W., Atkinson, R. C., Bellekens, X., Michie, C., Andonovic, I. & Tachtatzis, C., 23 Nov 2020, In: *Sensors*. 20, 22, 13 p., 6689.

Utilising deep learning techniques for effective zero-day attack detection

Hindy, H., Atkinson, R., Tachtatzis, C., Colin, J.-N., Bayne, E. & Bellekens, X., 14 Oct 2020, In: *Electronics*. 9, 10, 16 p., 1684.

Interoperability and integration testing methods for IoT systems: a systematic mapping study

Bureš, M., Klima, M., Rechtberger, V., Bellekens, X., Tachtatzis, C., Atkinson, R. & Ahmed, B. S., 18 Sept 2020, *International Conference on Software Engineering and Formal Methods: SEFM 2020: Software Engineering and Formal Methods*. de Boer, F. & Cerone, A. (eds.). Cham, Switzerland: Springer, p. 93-112 20 p. (Lecture Notes in computer Science; vol. 12310).

Gated pipelined folding ADC based low power sensor for large-scale radiometric partial discharge monitoring

Upton, D. W., Haigh, R. P., Mather, P. J., Lazaridis, P. I., Mistry, K., Zaharis, Z. D., Tachtatzis, C. & Atkinson, R. C., 15 Jul 2020, In: *IEEE Sensors Journal*. 20, 14, p. 7826-7836 11 p.

Non-destructive identification of fibre orientation in multi-ply biaxial laminates using contact temperature sensors

Gillespie, D. I., Hamilton, A. W., McKay, E. J., Neilson, B., Atkinson, R. C., Andonovic, I. & Tachtatzis, C., 10 Jul 2020, In: *Sensors*. 20, 14, 11 p., 3865.

A security perspective on Unikernels

Talbot, J., Pikula, P., Sweetmore, C., Rowe, S., Hindy, H., Tachtatzis, C., Atkinson, R. & Bellekens, X., 15 Jun 2020. 7 p.

A taxonomy of network threats and the effect of current datasets on intrusion detection systems

Hindy, H., Brosset, D., Bayne, E., Seeam, A., Tachtatzis, C., Atkinson, R. & Bellekens, X., 4 Jun 2020, In: *IEEE Access*. 8, p. 104650-104675 26 p.

Automatic annotation of subsea pipelines using deep learning

Stamoulakatos, A., Cardona, J., McCaig, C., Murray, D., Filius, H., Atkinson, R., Bellekens, X., Michie, C., Andonovic, I., Lazaridis, P., Hamilton, A., Hossain, M. M., Di Caterina, G. & Tachtatzis, C., 26 Jan 2020, In: *Sensors*. 20, 3, 15 p., 674.

Partial discharge detection and localization: using software defined radio

Mohamed, H., Lazaridis, P., Mather, P., Tachtatzis, C., Judd, M., Atkinson, R. & Glover, I. A., 30 Dec 2019, In: *IEEE Industrial Electronics Magazine*. 13, 4, p. 77-85 9 p.

Cyber-security internals of a Skoda Octavia vRS: a hands on approach

Urquhart, C., Bellekens, X., Tachtatzis, C., Atkinson, R., Hindy, H. & Seeam, A., 25 Sept 2019, (E-pub ahead of print) In: *IEEE Access*. 7, p. 146057-146069 13 p.

Geometrical thermal analysis as a form of Finite Element Analysis enhancement

Gillespie, D. I., Hamilton, A. W., Kruckenberg, T., Neilson, B., Atkinson, R. C., Andonovic, I. & Tachtatzis, C., 12 Sept 2019, p. 187-192. 6 p.

Improving RF-based partial discharge localization via machine learning ensemble method

Iorkyase, E. T., Tachtatzis, C., Glover, I. A., Lazaridis, P., Upton, D., Saeed, B. & Atkinson, R. C., 31 Aug 2019, In: *IEEE Transactions on Power Delivery*. 34, 4, p. 1478-1489 12 p.

From cyber-security deception to manipulation and gratification through gamification

Bellekens, X., Jayasekera, G., Hindy, H., Bureš, M., Brosset, D., Tachtatzis, C. & Atkinson, R., 31 Jul 2019, p. 99-114. 316 p.

A novel methodology for macroscale, thermal characterization of carbon fiber-reinforced polymer for integrated aircraft electrical power systems

Jones, C. E., Hamilton, A. W., Norman, P. J., Cleary, A., Galloway, S. J., Atkinson, R., Burt, G. M., Michie, C., Andonovic, I. & Tachtatzis, C., 30 Jun 2019, In: *IEEE Transactions on Transportation Electrification*. 5, 2, p. 479-489 11 p.

Low complexity wireless sensor system for partial discharge localisation

Iorkyase, E., Tachtatzis, C., Lazaridis, P., Glover, I. & Atkinson, R., 27 May 2019, In: *IET Wireless Sensor Systems*. 9, 3, p. 158-165 8 p.

Image analysis framework with focus evaluation for in situ characterisation of particle size and shape attributes

Cardona, J., Ferreira, C., McGinty, J., Hamilton, A., Agimelen, O. S., Cleary, A., Atkinson, R., Michie, C., Marshall, S., Chen, Y.-C., Sefcik, J., Andonovic, I. & Tachtatzis, C., 14 Dec 2018, In: *Chemical Engineering Science*. 191, p. 208-231 24 p.

A taxonomy of malicious traffic for intrusion detection systems

Hindy, H., Hodo, E., Bayne, E., Seem, A., Atkinson, R. & Bellekens, X., 28 Nov 2018, *2018 International Conference on Cyber Situational Awareness, Data Analytics and Assessment, CyberSA 2018*. Piscataway, N.J., 4 p. 8551386

An efficient algorithm for partial discharge localization in high-voltage systems using received signal strength

Khan, U. F., Lazaridis, P. I., Mohamed, H., Albarracín, R., Zaharis, Z. D., Atkinson, R. C., Tachtatzis, C. & Glover, I. A., 16 Nov 2018, In: *Sensors*. 18, 11, 19 p., 4000.

Low power high-speed folding ADC based partial discharge sensor for wireless fault detection in substations

Upton, D. W., Haigh, R. P., Saeed, B. I., Khan, U., Mohamed, H., Mistry, K., Mather, P. J., Lazaridis, P. I., Filho, F. T., Tachtatzis, C., Atkinson, R., Judd, M. & Glover, I. A., 27 Sept 2018. 4 p.

RF-based location of partial discharge sources using received signal features

Iorkyase, E. T., Tachtatzis, C., Glover, I. A. & Atkinson, R. C., 27 Sept 2018, (E-pub ahead of print) In: *IET High Voltage*. 5 p.

Localization of partial discharge by using received signal strength

Khan, U., Lazaridis, P., Mohamed, H., Upton, D., Mistry, K., Saeed, B., Mather, P., Vieira, M. F. Q., Atkinson, R. C., Tachtatzis, C. & Glover, I. A., 24 Sept 2018, *2018 2nd URSI Atlantic Radio Science Meeting (AT-RASC 2018)*. Piscataway, NJ., p. 1-4 4 p. 8471320

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Network Intrusion Detection using AI

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31 May 2029

DEFGRID - The Utility DSbD Demonstrator

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30 May 2024

Health and Care Futures: thematic areas workshop

Clark, R. (Organiser), Maguire, R. (Organiser), Sutter, J. (Organiser), Weir, N. M. (Invited speaker), Knifton, L. (Invited speaker), Shu, W. (Invited speaker), Quinn, N. (Invited speaker), Maier, A. (Participant), Kazakidi, A. (Participant), Harris, B. (Participant), Carswell, H. (Participant), Donnachie, C. (Participant), Corrigan, D. (Participant), Congreve, E. (Participant), Rai, H. (Participant), Megiddo, I. (Participant), Smith, K. (Participant), Nguyen, L. K. N. (Participant), McCann, L. (Participant), Gray, L. (Participant), Dennany, L. (Participant), Fossati, M. (Participant), Parra Rodriguez, M. (Participant), Smith, M. (Participant), Miller, M. (Participant), Rattray, N. (Participant), Connolly, P. (Participant), Rodgers, P. (Participant), Atkinson, R. (Participant), van der Meer, R. (Participant), Mueller, T. (Participant), Inns, T. (Participant), Cohen, W. (Participant), Luo, X. (Participant) & Egan, K. (Organiser)
30 May 2024

NHS Lanarkshire

Atkinson, R. (Visiting researcher)
2 Apr 2024 → 1 Apr 2029

Intuitive Introduction to Machine Learning

Atkinson, R. (Speaker)
31 May 2022

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3 Oct 2018

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Dimitrijevic, B. (Speaker), Grant, P. (Speaker), Martin, R. (Speaker), Skabara, P. (Speaker) & Atkinson, R. (Speaker)
28 Nov 2016

2015 IEEE 81st Vehicular Technology Conference

Atkinson, R. (Participant)
5 Nov 2015

EU - European Research Council (External organisation)

Atkinson, R. (Member)
14 Mar 2013

International Conference on Wireless Communications and Applications

Atkinson, R. (Member of programme committee)
1 Aug 2011

VTC Fall 2011

Atkinson, R. (Participant)
2011

Scottish Networking Event (SCONE)

Atkinson, R. (Organiser)
Sept 2009 → ...

External examiner for PhD vivas at Edinburgh University School of Engineering, and School of Informatics

Atkinson, R. (External Examiner)
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EPSRC (Engineering and Physical Sciences Research Council) (External organisation)

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