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| **label** | **topic** | **terms** | **examples** |
| AI in decision Making | 1 | system, decis, algorithm, trust, use, legal, human, data, need, respons | Transparent Rational Decisions by Argumentation (TRaDAr), UKRI Trustworthy Autonomous Systems Node in Governance and Regulation, EthicalML: Injecting Ethical and Legal Constraints into Machine Learning Models |
| Data Science\* | 2 | problem, model, data, applic, learn, method, algorithm, use, domain, propos | Northwest European Seasonal Weather Prediction from Complex Systems Modelling, Generative Kernels and Score Spaces for Classification of Speech, Warmstarting Techniques for Stochastic Programming Problems solved by Interior Point Methods |
| Robotic and Automation | 3 | robot, system, autonom, environ, object, human, learn, task, oper, control | Sustained Autonomy through Plan-based Control and World Modelling with Uncertainty, REcoVER: Learning algorithms for REsilient and VErsatile Robots, Robot In-hand Dexterous manipulation by extracting data from human manipulation of objects to improve robotic autonomy and dexterity - InDex |
| Others\* | 4 | inform, user, use, technolog, cancer, can, person, process, requir, record | Framework for Computational Persuasion, Novel optimization framework for real-time automated radiation therapy, EPSRC-SFI: SpheryStream |
| Sound Recognition | 5 | sound, imag, collect, new, use, audio, archiv, learn, sourc, machin | Making Sense of Sounds, From Lima to Canton and Beyond: An AI-aided heritage materials research platform for studying globalisation through art, Computational wszapproaches to cognition: the origins of social and causal reasoning in children and primates |
| Industrial Collaboration | 6 | industri, digit, technolog, new, work, support, develop, impact, innov, collabor | Centre for Digital Citizens - Next Stage Digital Economy Centre, Creative Media Labs: Innovations in Screen Storytelling in the Age of Interactivity and Immersion, The Digital Creativity Hub |
| AI for Recreation | 7 | comput, music, creativ, workshop, new, research, game, intellig, network, support | Engaging three user communities with applications and outcomes of computational music creativity, AEOLIAN (Artificial intelligence for cultural organisations), Computer-Human Interactive Performance Symposium (CHIPS) |
| **Urban Twin[[1]](#endnote-1) \*** | 8 | data, (Urban, Twin), model, use, learn, can, transport, digit, machin, new, physic, | deeP redUced oRder predIctive Fluid dYnamics model (PURIFY), Probing for New Physics at the LHC: Unraveling the Higgs Mechanism through Polarisation and Hadronic Decays, Learning an urban grammar from satellite data through AI |
| Business Analytics | 9 | servic, busi, see, market, cost, technolog, map, provid, product, requir | Data Science for the Detection of Emerging Music Styles, Bilateral ESRC/FNR: Experimental Assessment of the Societal Impact of Algorithmic Traders in Asset Markets, Unlocking the Potential of AI for English Law |
| AI as Management Agent | 10 | agent, human, can, plan, system, intellig, use, argument, decis, comput | Designing Mechanisms for Automated Resource Allocation: A Case for Support, AI Social Agents, Intelligent Agents for Home Energy Management |
| Evolutionary Computation | 11 | model, problem, comput, process, use, biolog, can, system, new, design | Network Coding via Evolutionary Algorithms, Rigorous Runtime Analysis of Nature Inspired Meta-heuristics, Watched Literals and Learning for Constraint Programming |
| UI System-User Interactions | 12 | system, interact, user, can, use, natur, dialogu, develop, languag, interfac | Unmute: Opening Spoken Language Interaction to the Currently Unheard, MaDrIgAL: MultiDimensional Interaction management and Adaptive Learning, An Infrastructure for Adaptive System Development |
| Knowledge Generation | 13 | data, use, method, work, approach, new, report, provid, model, techniqu | Analysing Narrative Aspects of UK Preliminary Earnings Announcements and Annual Reports: Tools and Insights for Researchers and Regulators, Fast Generalised Rule Induction, Matheuristics for multi-criterion data clustering: towards multi-criterion big data analytics |
| Healthcare | 14 | patient, diseas, data, use, can, clinic, health, healthcar, care, risk | Integrated Technology Platform to Support Optimal Management of Ageing with Diabetes, SPHERE - A Sensor Platform for Healthcare in a Residential Environment (IRC Next Steps), Feasibility Study: Integrating Games-Based Learning and Computational Modelling to Control MRSA. |
| Natural Language Processing | 15 | model, languag, learn, use, translat, data, machin, human, can, system | Non-Parametric Models of Phrase-based Machine Translation, Bayesian Synchronous Grammar Induction, Modelling Discourse in Statistical Machine Translation |
| Programming | 16 | use, comput, softwar, techniqu, develop, secur, can, automat, human, theori | Fast Runtime Verification via Machine Learning, Automatic repair of natural source code, Statistical Natural Language Processing Methods for Computer Program Source Code |
| Neural Networking | 17 | learn, brain, network, comput, neural, use, new, design, process, can | Brain-inspired non-stationary learning., MOA: High Efficiency Deep Learning for Embedded and Mobile Platforms (Full EPSRC Fellowship Submission), Automating electron microscopy: machine learning for cluster identification |
| Data Analytic | 18 | data, develop, monitor, use, detect, system, sensor, analysi, inform, cloud | Integrated software solution for the 3-dimensional capture and analysis of footwear evidence, CRITiCaL - Combatting cRiminals In The CLoud, SENSUM: Smart SENSing of landscapes Undergoing hazardous hydrogeological Movement |
| Chemistry | 19 | new, use, drug, materi, develop, equip, process, cell, manufactur, make | A Robot Chemist, High-throughput Differential Expression Proteomics, Capital award for Core Equipment |
| Ontology | 20 | knowledg, ontolog, reason, use, concept, can, system, model, exampl, web | ConDOR: Consequence-Driven Ontology Reasoning, HermiT: Reasoning with Large Ontologies, LogMap: Logic-based Methods for Ontology Mapping |

1. The package `toLDAviz` provide alternative way to evaluate term relevance. Term “urban” and “twin” were amongst exclusive to topic 8, hence topic 8’s lebal. [↑](#endnote-ref-1)