

**FACULTY OF NATURAL, MATHEMATICAL
& ENGINEERING SCIENCES**
DEPARTMENT OF INFORMATICS

KING'S
College
LONDON

Enterprise & Engagement Report 2021-23

Applying knowledge and expertise
to real-world challenges

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1.0 Context

Enterprise & Engagement (E&E) encompasses a diverse set of activities that can make our research and education more successful and achieve greater impact. As scientists, we are increasingly mindful of our broader responsibilities. Impact is not just a function of scientific publications presented to expert audiences, but a much broader concept. To leave our mark on the world and be a force for innovation, commercial success, and societal change, we need a strong ecosystem of partnerships with industry, government, and civil society.

Informatics is a research-intensive Department, which has substantially expanded in academic capacity and expertise over the past years. As shown in this report, the partnerships we forge provide valuable contributions to the King's ecosystem, stimulate entrepreneurship activities, improve the experience and increase the employability of our students.

The opportunities to engage with industry and other stakeholders are varied, from one-off consultancy work to unlocking entirely new income streams, commercialising research results, contributing to policy, and student placements. This directly aligns with the strategic direction of King's, which highlights the importance of '...enquiry-driven research [to] enable interdisciplinary collaborations that translate into new insights and solutions for challenges faced in London, across the UK and around the world' (King's Vision 2029).

Our Research Excellence Framework (REF) 2021 results were excellent, and our progress since REF2014 is notable: with 75 per cent of our impact submission rated four-star (world-leading). The Department continues its ambitious growth plans and now has more REF-eligible staff than ever before. This growth is essential to cover the expanding breadth of modern computing research, and to increase research impact. With our new staff building up their research and collaborations at King's and beyond, the strength and status of the Department will only increase.

E&E is an integral and valued component of what we do, however, it does require specific commitment, focus, and action that may not always organically follow on from our research and education efforts. This report, highlighting Informatics' E&E work over the last two academic years, shows our take on how E&E can enrich a research-led academic environment if embedded throughout everything we do, from education and research collaborations to staff training and stakeholder engagement. Much has already been achieved, and we are excited about the future for E&E in the Department.



To leave our mark on the world and be a force of innovation, commercial success, and societal change, we need a strong ecosystem of partnerships with industry, government, and civil society.

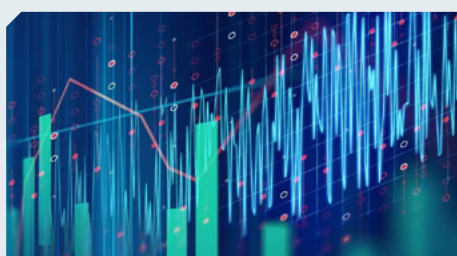
Professor Elena Simperl

Deputy Head of Department for Enterprise & Engagement

1.1 Structure of the Department

Our research groups are based on common scientific areas, whilst our hubs focus on external research challenges, which often require expertise and ideas from multiple sub-disciplines. Hubs provide a virtual clustering of researchers and encourage new research collaborations between groups, across King's, and with external partners, with the view of developing a strong impact culture.

Our research groups



Algorithms & Data Analysis

Algorithmic solutions and concrete implementations, for various applications, across multiple sectors.



Cybersecurity

Design, modelling, analysis, verification and testing of networks and systems to tackle cybersecurity and privacy problems.



Distributed Artificial Intelligence

Social and technical contexts of decentralised and distributed intelligence, including multi-agent systems, crowd computing, and semantic web.



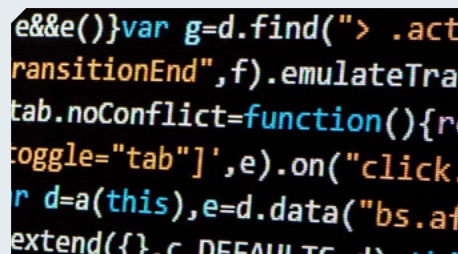
Human Centred Computing Research

Design, development, and evaluation of systems with which humans interact and engage.



Reasoning & Planning

Symbolic models for reasoning involving argumentation, knowledge representation and planning.



Software Systems

Modelling, design and engineering of software systems, automated reasoning about system properties, and mathematical foundations of modelling computing systems.

Our hubs

Arts and
creativity

Finance

Health

Security

Sustainability

Trusted
Autonomous
Systems (TAS)

Urban living

2.0 Working in partnership

Partnerships are at the heart of our E&E work. It is through the sharing of ideas, concepts, and solutions, that our research delivers the greatest impact for societal benefit.

Our partnership work is founded on our links with industry, facilitated through our Industry Advisory Board (IAB). With representation that aligns with our research themes, the IAB supports the Department in a non-executive capacity.

The IAB:

- Advises on the relevance of our undergraduate and postgraduate programmes.
- Reviews our research for potential industry links, providing letters of support, and internships.
- Feeds into Department strategy by providing guidance on long-term developments and sector trends.
- Identifies opportunities for the commercialisation of our research.

We work in partnership with businesses, large and small, and with public administrations, artists, and local charities to help solve their challenges with cutting-edge research and education.

Engagements can take many forms. This ranges from bespoke consultancy projects to address timely specific questions; building proofs-of-concept and running feasibility studies; sponsored student projects; to strategic partnerships realising bold longer-term goals.

Our partnerships in numbers

280+

unique industry collaborations

400+

industry collaborations

£8.5m+

worth of contributions from industry collaborators

£2.9m

budget awarded by industry funders

Current IAB membership

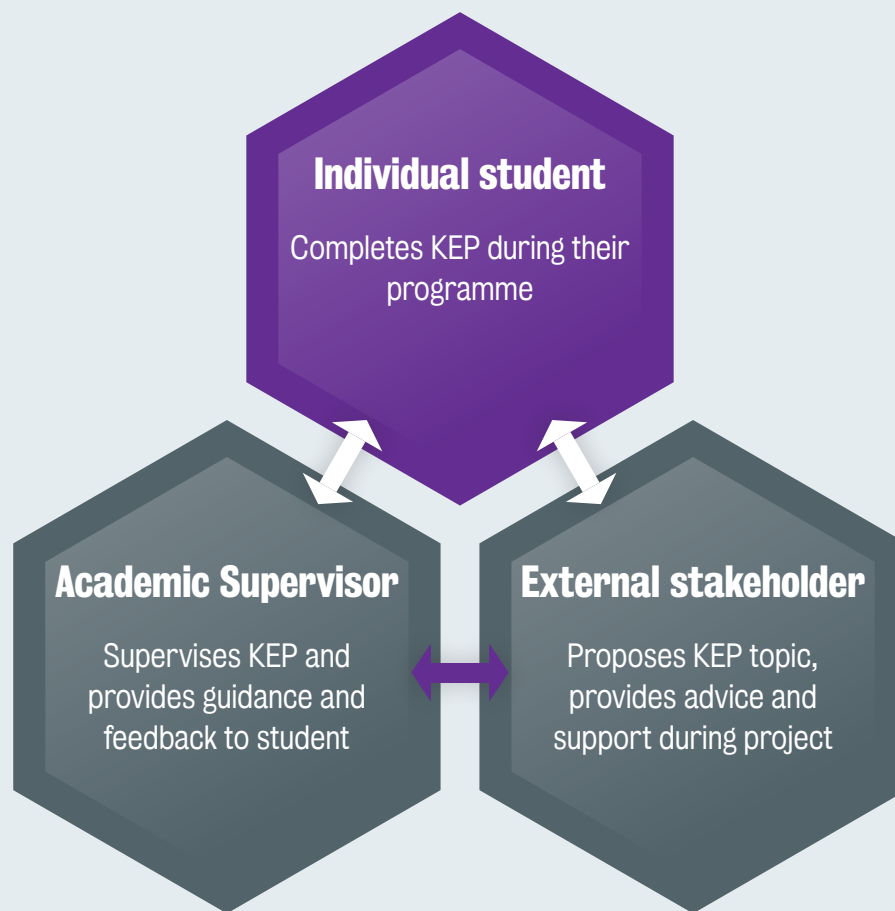
- **Madeline Bailey** (Norton Rose Fulbright)
- **Chris Bailey** (IBM)
- **Niall Creech** (William Hill)
- **Lorenzo Grillo** (Alvarez & Marsal)
- **Jia-Yan Gu** (NatWest)
- **Liucheng Guo** (TGO)
- **Karl Hoods** (Department for Energy Security & Net Zero)
- **Janette Jones** (Unilever)
- **Leslie Kanthan** (DataSpartan)
- **Jason Maude** (Starling Bank)
- **Jon McLoone** (Wolfram)
- **Natalie Pankova** (Zinc VC)
- **Tim Stone** (Nuclear Risk Insurers)
- **Oana Tifrea-Marcuska** (Bloomberg)
- **Yue Wang** (Samsung)
- **Sonja Zillner** (Siemens)
- **Raouf Yousfi** (Terra)
- **Phillippa Chick** (Intel)
- **Fergus E Kidd** (Avanade)
- **Andrew Krentz** (Metadvice)
- **Burim Bivolaku** (Intercontinental Exchange)
- **Simon Miles** (Aerogility)
- **Nikolaos Siafakas** (Theory and Practice of Software Ltd)
- **Ernest Omane-Kodie** (London Stock Exchange Group)
- **Nitin Dhall** (Sahaj)

2.1 Student projects and enterprise

Knowledge Exchange Projects (KEPs) are group and individual projects that can be taken by undergraduate students during their third and fourth years, as well as by MSc students.

An external stakeholder, which could be a company, a public authority, or even another Department at King's, suggests a topic for a project, and participates, alongside an academic from the Department, in the supervision of the project.

KEPs allow students to conduct their project research within a stakeholder's problem domain, giving their work real-world impact.



The KEP programme allows our partners to fast-track innovation. Students develop proofs-of-concept and prototypical solutions, which allows partners to explore ideas with minimal costs and disruption to their business.

Domain advisors suggest projects that run during term time, following the same format as other student projects in the Department.

Each project has a named domain advisor, and an academic supervisor from Informatics. Student selection and project assessment are carried out by the Department, with significant input from all parties.

The popularity of KEPs among our students is clear to see with a 193 per cent application rate from our undergraduate students during 2023-24 (29 applications for 15 opportunities).

2.1 Student projects and enterprise

2.1.1 Amazon Web Services (AWS) Impact Accelerator

One model of KEP is our work with Amazon Web Services (AWS) to deliver an Impact Accelerator, which builds impact capacity and capability within the Department, in partnership with an organisation that offers a track record in innovation, a commitment to data-driven decision-making, as well as computing and technology resources in data science and AI.

The Impact Accelerator was launched in September 2022 with a course for fourth-year MSci students, whereby students work in groups to solve real-world data and technology challenges set by public sector stakeholders. It is a year-long research and practice-led course in which students apply and generate digital innovation techniques and tools to identify solutions to complex problems.

In the first semester, students critically explore the ways advanced technological solutions are planned, designed, built, and governed: and they reflect on how to evaluate the impact their solutions have on public sector performance and communities. In the second semester, students work on complex problems presented by public sector challenge sponsors and gain experience in developing a substantial software, data, or AI project in teams, guided by King's and AWS mentors.

The challenges the students worked on in 2022-23 covered issues as diverse as sexual health, social housing, and waste management, all requiring them to design and implement software using AWS tools that could improve the delivery of specific services more effectively. In doing so, they gained real-world experience of building innovative digital solutions that organisations like AWS develop every day.

Outcomes and Impacts:

- **Enhanced student learning:** students gained a deep understanding of impact and innovation in the public sector, as well as exposure to cutting-edge technologies and design thinking processes.
- **Industry exposure:** by engaging with AWS experts, students had the opportunity to interact with professionals working at the forefront of technology and innovation in the public sector.
- **Practical skills development:** through hands-on labs and activities, students developed practical skills in digital innovation, customer-centric design, and responsible data use.
- **Entrepreneurship opportunities:** the Impact Accelerator facilitated connections between students and public sector partners in the field, launching potential opportunities to fill market gaps with student-led start-ups.
- **Promoting social impact:** the Impact Accelerator inspired students to think critically about social challenges and gave them the tools and knowledge to develop innovative solutions that can drive positive change in the public sector.

Several of the prototypes developed by the students were identified as systems that councils could adopt into their operations, including the winning group of the showcase, who designed a sexual health directory for Lambeth Council.

This has been a completely new way of problem-solving for us. Students don't have the mental barriers which sometimes come with the digital services field, and that's brought a boldness to the projects we've seen today.

Going forward, I think it's going to be vital that we bring in students at academic institutions like King's to solve issues like these in the public sector. I don't know why we weren't thinking of this sooner.

James Isaacs

Head of Service Operations at Richmond and Wandsworth Council

By giving students that contact with employers, we're showing them what they can do with the knowledge and skills from their degree, and the sponsors are giving back because they know we have the capacity to help solve these historic problems. Some of our students are thinking about using the solutions they've made here to launch their own business and as a Department we're offering out support to make that a reality.

Professor Elena Simperl

Deputy Head of Department for Enterprise & Engagement



2.1 Student projects and enterprise

2.1.2 Centre for Urban Science and Progress (CUSP) Data Dives

A third student engagement project is the Centre for Urban Science and Progress (CUSP) London 'Urban Lab' partnership with Westminster City Council (WCC) and UCL's Centre for Advanced Spatial Analysis (CASA).

The partnership launched a series of initiatives, which identified opportunities for students to be involved in urban dataset projects which are of mutual benefit to WCC, whilst creating real outcomes and opportunities across London.

Through a combination of student work placements, consultancy work, secondment opportunities, and more than twenty MSc and PhD research projects, the Urban Lab partnership has generated remarkable insights and new perspectives to shape evidence-based policymaking.

One of the big wins from working with CUSP London, was that we got the Data Strategy arranged and open data is now in our City for All Strategy, which is a big culture change for us.

Dr Sophie Johnson

Deputy Chief Analyst, Westminster City Council

The MSc Urban Informatics at CUSP London has helped me launch my career in the UK. The course covered advanced data science tools and techniques but just as quickly provided real opportunities to use them, working with real-world data in projects and research... A CUSP placement at global consulting firm WSP provided me the connections which gave me my first full-time work in London.

Raphael Canty

2020-21 alumnus, now employed at WSP in London

At Nokia, we cherish our partnership with CUSP, where cutting-edge technology meets brilliant minds, fostering co-creation, innovation, and a culture of transformative ideas. Together we shape the future of connectivity, revolutionising how people experience and interact with technology in the cities of tomorrow.

Professor Daniele Quercia

Nokia Bell labs



2.2 Partnerships and collaborations

As an aspirational and forward-looking department, we are keen to expand this work with new partners, working on innovative topics. We provide here a few examples of our collaborations and partnerships with industry and the community.

2.2.1 Strand/Aldwych Data Springboard

Working with Westminster City Council, the local government entity responsible for the Strand/Aldwych redevelopment, we explored ways to innovate with data for the area. We assessed participatory data stewardship and governance formats that would serve as a platform for bottom-up engagements, decision-making, and innovations. The Data Springboard project engaged public and private stakeholders in a range of workshops. In these engagements, we discussed the key questions around the Data Springboard, including how stakeholders could benefit from data sharing, what challenges we should focus on, and how we should approach questions of data ethics.

2.2.2 Shopify

Professor Laurie Tratt is a Royal Academy of Engineering (RAEng) Research Chair in Language Engineering at King's College London.

Laurie aims to improve the performance of programming languages such as Ruby and Python by retrofitting them with state-of-the-art research techniques taken from Just-In-Time compilers (JIT): which will improve programmer productivity while also saving energy by reducing the need for servers.

I'm extremely grateful to Shopify and the Royal Academy of Engineering for funding my research into Language Engineering! We're trying a novel approach to solving a real problem around programming language performance that's encountered by many people in industry and beyond. The crucial thing about the funding from the RAEng and Shopify is that it gives us both the time (five years) and resources (both my time and that of a Research Fellow) to tackle this important problem. I'm particularly looking forward to working with engineers from Shopify, who can help us better understand the effects of our work on large, real world, systems.

Professor Laurence Tratt

Royal Academy of Engineering (RAEng) Research Chair in Language Engineering at King's College London

2.2.3 iCASE Studentship with BT

This Industrial CASE (iCASE) award, in partnership with British Telecommunications (BT), explores knowledge graphs (KGs) for question-answering over structured and unstructured data. BT, as one of the world's leading communication services companies, serving customers in more than 170 countries worldwide, is well placed to recognise that KGs are on the rise as a process for connecting structured and unstructured data in organisations.

With many information services (including search engines, chatbots and recommender systems) using KGs to extract, link and contextualise answers, this project proposes an end-to-end system for question answering over structured and unstructured data, combining information extraction, multimodal querying, and KG embedding.

As part of their commitment to the work, BT provides a minimum of thirty days of supervision in each of the four years of the project, at least three months working at BT's research labs for the PhD student, and a direct cash contribution of over £40,000.

BT Research believes that Large Language Models (LLMs) [are] one of the most important innovations of the last decade. This is an exciting opportunity to work with Kings College London to explore how LLMs' transformative capabilities can unlock opportunities for ourselves and our customers. The focus on embedding ethical AI principles and Knowledge Graphs makes the work particularly relevant for large organisations like us. Personally, I am really looking forward to working together to research this exciting area.

Andrew Reeves

Senior Manager, Applied Research, BT

This iCASE funding provides a unique opportunity for me to delve into the cutting-edge advancements in Large Language Models (LLMs). My focus is on evaluating their potential integration with equally robust concepts and developments in Knowledge Graphs. This integration is aimed at the creation of a sophisticated question-answering system, one that prioritises explainability, responsibility, and adherence to the foundational principles of ethical AI and Human-Computer Interaction (HCI) design.

Arunav Das

PhD student

2.2.4 Safe & Trusted AI

The UKRI Centre for Doctoral Training (CDT) in Safe and Trusted Artificial Intelligence (STAI), is led by a team of renowned experts from the Department and Imperial College London. The partnership is training a new generation of scientists and engineers who are experts in methods of safe and trusted AI. The Centre offers a unique four-year PhD programme, focusing on the use of symbolic AI techniques for ensuring the safety and trustworthiness of AI systems, and engages with industry partnerships through student sponsorship, training, student placement opportunities and cohort-building activities. The Centre boasts more than a dozen fully-funded studentships per year, and more than £1m in committed industry funding from over twenty industry partners.

Engagement with a broad range of non-academic partners is a key component of the Centre's work. This engagement provides assurance that both the research supported by the Centre and the skills developed by students will be relevant and valuable to industry and society at large, while also informing and supporting UK industry in producing state-of-the-art safe and trusted AI solutions. CDT students have carried out internships at organisations including the UK Government's Centre for Data Ethics and Innovation, JP Morgan, the Centre on Long-Term Risk, and Boston Consulting Group.



3.0 Public and industry engagement

Engagement beyond the scale of the Department and College is crucial for our longer-term strategy. As part of our commitment to this, two new Faculty posts have been created to increase our activity with schools and the local community, and we are already exploring ways in which we can dovetail this engagement with our educational research.

3.1 Computerphile

To reach a wider audience, we provide free-to-access learning through the Computerphile YouTube channel.

For example, Professor Laurence Tratt's videos on Just In Time Compilers and Garbage Collection (Mark & Sweep) for the channel have reached over 200,000 views.

In total, Departmental contribution to Computerphile content has been viewed over 1,000,000 times in less than 12 months, covering topics such as: Defining Harm for AI Systems; Legacy Code Conversion; Malware and Machine Learning; Verifying AI 'Black Boxes'; Model Driven Engineering; Blockchain; and Knowledge Graphs.

To view any of this content, visit youtube.com/@Computerphile

3.2 Purrble

Our engagement can have impact in the wider world in other ways too, which may well be less expected.

Dr Petr Slovak and his team have designed a novel intervention that helps children and young people regulate their emotions, by providing support when and where they need it, using the Purrble companion. Purrble is a cuddly, interactive tool which can help users find calm in moments of stress or overwhelm. It was featured on the cover of Time magazine as part of their Best Inventions of the Year 2021 issue, and even made a visit to Downing Street as part of the London Biennale in June 2023. Purrble is currently being trialled in an NHS Eating Disorders clinic, as well as being part of a Randomised Controlled Trial testing its effects for youth who struggle with self-harm.

What's really been missing [is] an opportunity to support the child – and their parent – directly at the times when the child is angry, scared, or anxious. The smart toys we've designed are a first proof-of-concept of how such situated interventions could look like.

Dr Petr Slovak

Senior Lecturer in Computer Science and Mental Health

3.3 Wearable Technologies

PhD student Humphrey Curtis, working with Dr Tim Neate and Dr Rita Borgo, has also been exploring wearable Augmentative and Alternative Communication (AAC) technology. AAC has a critical role to play in empowering individuals with language impairments. Making use of a co-design process to ensure engagement with end-users, this offers a major advance in support for individuals with complex communication needs. The wearable technology helps those with speech or language impairment to communicate their thoughts, feelings and ideas - and foreshadows expected advancements in the future of discreet tech, where wearable technologies will become less obtrusive, more immersive and more intelligent.

3.4 IMPETUS

A further way that we encourage and enable engagement is through the IMPETUS project, led by Professor Elena Simperl. Launched in July 2022, with King's as the scientific and technical lead, this project funds and supports citizen science initiatives across Europe. In doing so, IMPETUS supports work exploring sustainability, diversity and inclusion, and access to science.

IMPETUS comprises two parts: an Accelerator Programme and a European Union Prize for Citizen Science. The Accelerator Programme provides up to €20,000 for new citizen science projects, or €10,000 for ongoing projects. Those in receipt of funding have access to a set of services tailored to their individual needs that include intensive training, online mentoring, peer learning and networking.

Citizen science holds huge potential as an impact area for a lot of research we are doing in my team and in the Department more widely. We have the opportunity to design new methods and tools for crowdsourced data collection, curation, and analysis, which lead to environmental datasets that can easily compete in quality and costs with existing ones that are produced by more traditional science outlets or public authorities.

A second timely area of research for us is data governance, with a particular focus on data justice and ethics – we want to ensure that the citizen-generated datasets are not biased towards certain areas or populations and that they do not create or amplify social and environmental inequalities.

Professor Elena Simperl

Deputy Head of Department for Enterprise & Engagement

3.5 Research Showcase for Industry

In June 2023, the Department held its first Informatics specific research showcase for industry, highlighting the interdisciplinary research carried out in the Department, and helping participants identify the many ways in which this research could support innovation in their industry.

The showcase provided an excellent opportunity to promote collaboration and knowledge transfer between the Department's academics and business communities, by sharing research projects and prototypes created by our staff and students.

From software systems to smart cities, cybersecurity, AI, digital healthcare, and green computing, our research addresses the key economic, societal, and environmental challenges of our time. Through interactive short talks, presentations and software demonstrations, the event was a great success in communicating our collective passion in these areas with investors and industry professionals.



4.0 Training and support

Essential to the effective delivery of E&E activity is ensuring that Departmental colleagues are supported in their efforts and upskilled in all relevant competencies. This support is coordinated and primarily delivered through colleagues in the Department, with the support of the E&E team (see section 6) and is supplemented by tailored training and development opportunities. This provision includes: training on impact for computing academics; development clinics delivered through the Faculty; Research and E&E newsletters; and a webinar series.

4.1 Training on Impact for Computing Academics

This bespoke, full-day training programme was first delivered in January 2022 and is mandatory for all new academic staff as a condition of their probation. The learning content was devised and developed with the support of an external facilitator and comprises contributions from multiple senior colleagues from within the Department. The programme has been successfully re-run in November 2022, February 2023, and October 2023. Already close to 40 per cent of the Department's academic colleagues have participated. The programme will continue to be run on an annual basis, ensuring that all new staff have access to this important learning within the first 12 months of their employment.

I found the session an extremely useful overview of impact. It helped me reframe some of my previous research, and also think about future research, in terms of its impact. I found the slides shared particularly useful and will keep them handy whenever I am writing a new research bid, or reflecting on my current research.

Dr Timothy Neate

Lecturer in Computer Science

4.2 Increasing Impact Through Partnership Grants

This programme of support provides successful applicants with up to £5,000 for activities that show a clear pathway to impact, and which help expand the reach and significance of existing research.

Dr Matteo Leonetti successfully secured funding to attend the European Robotics Competition at Milton Keynes in the Autumn of 2023. This ground-breaking work is aimed at fostering research on the next generation of service robots that are able to collaborate with and support a range of everyday tasks.

Students from the Department developed software for an autonomous mobile robot, building on their Introduction to Robotics module, and taking what they learn in labs and classrooms into the real world. The students competed with teams from other European institutions and in doing so deepened their knowledge of AI for robot autonomy and robot programming. It provided them with a unique hands-on experience strongly sought after in the job market, and was even featured on BBC One's *The One Show*.

The future of the work presented at Milton Keynes will focus on how robots can collaborate with humans and adapt to specific individuals' behaviours through techniques including reinforcement learning.

There is a huge difference between what works in simulation in the lab and what works in the real world. Building a mobile, talking system that can navigate the unexpected challenges posed by a real-world is a great learning experience and is very gratifying.

Zoe Evans

PhD student

I have brought students to this event for the past six years and plan to develop the team further within our Computer Science and Artificial Intelligence programmes at King's. This competition goes far beyond what we're able to teach in the classroom, and the open-ended collaboration it invites is a mirror to the problem-solving, project-based work seen in industry.

Dr Matteo Leonetti

Senior Lecturer in Computer Science

Dr Yijing Li, Senior Lecturer in Urban Informatics, used her funding to design a set of playing cards for use by MSc Urban Informatics students. This was built upon the KASE (Knowledge, Attributes, Skills, Experience) employability model developed by Daubney (2022). Each suit represents one of the four elements of KASE, and the fifty-four cards (fifty-two including two Jokers) contain a range of questions and facets specifically relating to the King's College London MSc Urban Informatics curriculum. Whilst playing Poker or another card game, students were able to absorb facets of KASE and better understand the value of their course in the working world.

4.3 Clinics

Development clinics have been delivered both at a Departmental and Faculty level. They provide individual staff, and those working on research collaborations, with tailored guidance on the most effective way to engage with the business and industry community.

Our most recent clinics have covered Citizen Science for Research Engagement, Consultancy, and Software and Database Licensing.

4.4 Webinars and other courses

The webinar series offers bitesize sessions, offering a chance to upskill or explore specific key issues, as well as providing an opportunity to liaise with like-minded colleagues on E&E issues.

Recent webinars and courses:

- KTP: Making Knowledge Exchange work for Academia and Business
- Integrated Research Impact and Grant Applications
- Smart Grants and Knowledge Transfer
- Boosting the Public Profile of your Research
- King's Culture
- Intellectual Property at King's
- Research in 5G, 6G and AI

4.5 Newsletters

Monthly research, enterprise and engagement newsletters are provided for members of the Department, reaching more than 80 colleagues each edition on average. The newsletters, published online since October 2022, cover recent news, research grants and awards, an update on research standing and visibility, funding calls, and relevant additional resources to support colleagues in their E&E activity. Coordinated through the E&E team (see section 6) they provide an essential and concise summary of the wide variety of activities undertaken across the Department, as well as highlighting any calls to action.

4.6 Executive Education & Consultancy

Staff in the Department have the expertise to provide bespoke consultancy support to industry partners, and to provide executive education to external partners' staff. These highly specialised and tailored interventions translate our expertise in research for the specific commercial and developmental benefit of those we work with.

By their nature, our consultancy and executive education engagements are confidential. To talk further about training or consultancy support please get in contact (see section 7).



5.0 The E&E Team

In the Autumn of 2020, the Faculty established an E&E Committee to lead, champion and develop a thriving culture of enterprise and engagement. The committee's work focuses on achieving a higher degree of impact; creating potential new income streams and funding; and bringing other benefits to staff and students.

This is set up explicitly to respond proactively to key national emerging opportunities, by establishing several influential relationships that promote and increase the standing of our NMES disciplines and support the commercial development of our research.

Specific additional support for the Department of Informatics is provided by:

- **Elena Simperl**, Professor of Computer Science and Deputy Head of Department for E&E
- **Hana Chockler**, Reader in Computer Science and Partnerships Lead
- **Hector Menendez**, Lecturer in Computer Science and KEP coordinator
- **Rameez Subhan**, Research Support Manager
- **Tors MacIver**, Student Industry Projects Officer

The Department E&E Committee, the first of its kind within the Faculty, exists to devise and oversee the implementation of the E&E strategy. This involves coordinating and planning E&E activities across the Department, managing strategic partnerships with non-academic stakeholders, and ensuring the Department maintains an inclusive, supportive and responsible culture of impact and innovation. The Committee meets regularly and all academic staff are able to observe, with agendas and minutes being made available to the entire Department.

Long-term objectives:

- To promote and embed an effective culture of E&E within the Faculty, and nurture an environment that supports this;
- increase the impact of our research and teaching;
- support the next generation of leaders, researchers, and entrepreneurs;
- enhance our enterprise and our national and international profile by engaging with industry, government, policymakers, and international academic partners;
- offer our expertise and skills to the public, and collaborate with local communities;
- boost our reputation amongst funders, academic and industry partners, governments, staff, and potential future students through effective communication of NMES's world-leading research and teaching.



Meet some of the team

Dr Hector Menendez

Lecturer in Computer Science



As the Knowledge Exchange Projects coordinator, which involves students' individual projects related to enterprise and engagement, I oversee and guide stakeholders, academic supervisors, and students in aligning with the principles of enterprise and engagement.

My role involves facilitating real-world connections, fostering collaborations with industry partners, and encouraging innovative thinking. The aim is to bridge academic learning with practical applications, enhancing students' skills and preparing them for the demands of the professional world.

One of the biggest challenges in my role is striking a balance between academic rigor and real-world applicability. It can be challenging to ensure that projects meet both educational objectives and industry relevance.

What I enjoy most about my work is witnessing the transformation of students as they tackle complex challenges, gain confidence, and develop practical skills. Seeing their projects evolve from ideas to impactful solutions is incredibly rewarding. Moreover, fostering connections between students and industry professionals brings a sense of fulfilment, as it contributes to the growth of a vibrant academic and professional network.

Enterprise and Engagement in Informatics are crucial because this bridges the gap between theoretical knowledge and practical application. In the field of Informatics, where technology evolves rapidly, students need to understand how their skills translate to real-world scenarios. E&E initiatives empower students to develop solutions that address industry needs, enhancing their employability and equip them to make meaningful contributions to the tech landscape.

Mr Rameez Subhan

Research Support Manager



I help manage the research and PGR support within the Department, to ensure that researchers, academics, and PGR students all receive high-quality advice, guidance and most of all, administrative support, for their world-leading research. I also work quite closely with Professor Elena Simperl, our Enterprise & Engagement lead, as that's a priority within our Department (eg to get more industry partners and do more outreach, to make sure our research reaches the widest possible audience).

It's challenging to balance our E&E activities with other commitments within the Department, such as research and education. It's vital that we do so though, because there's so much scope for our work to reach audiences outside of the academic environment – such as industry leaders, policy makers, charities and other stakeholders – and to make a real difference to the world, as has been demonstrated through this report.

I love working with such great academics, who are leaders within their fields! It's great to see our academics writing about AI and the future of work on national newspapers, or to put on BBC news and see our academics on the TV talking about Security & Privacy for example. I'm proud to work with them, and for this Department.

6.0 Looking ahead

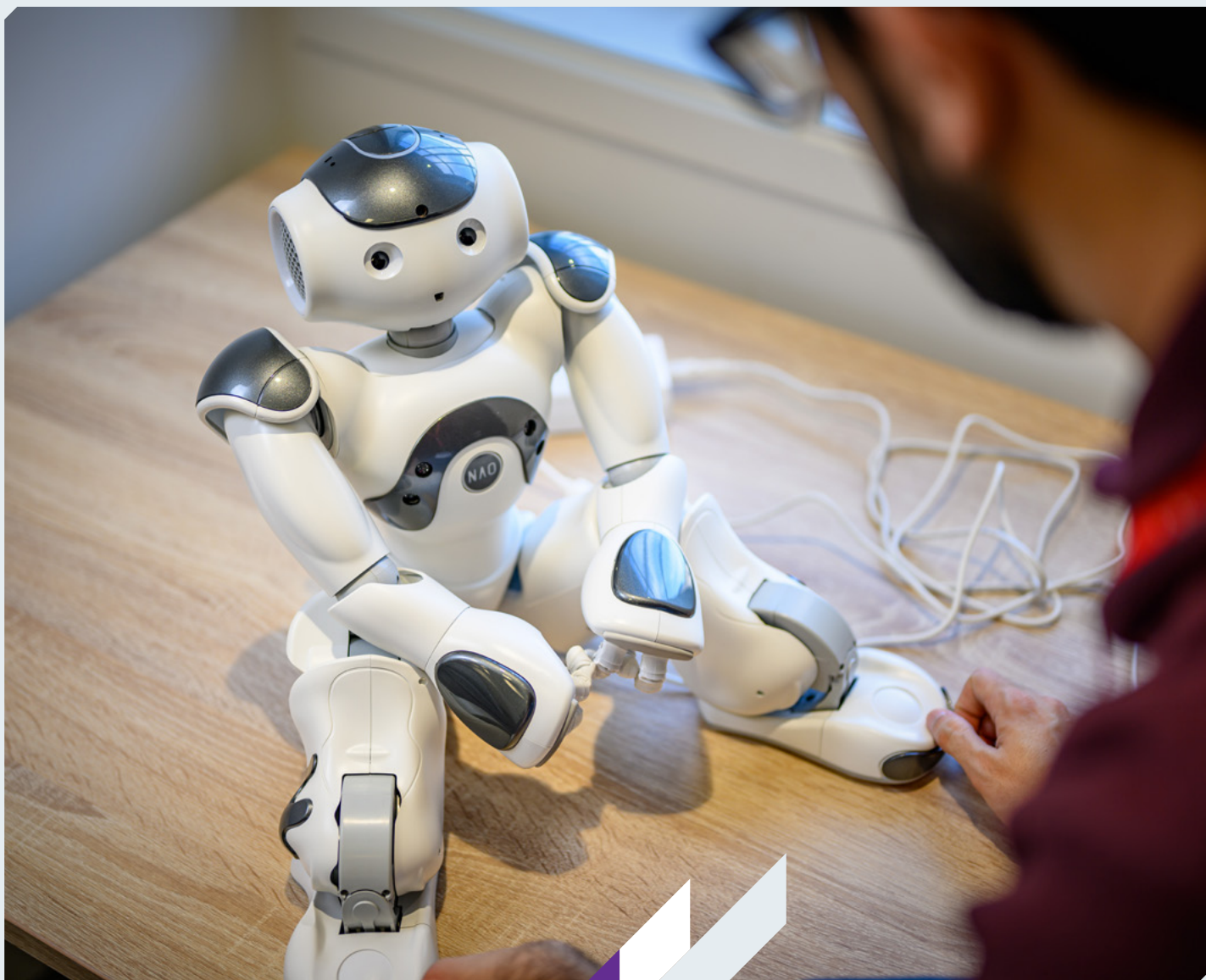
E&E is integral to the NMES five-year strategy *Delivering Sustainable Academic Excellence* and central to the University moving forward. The strategy comprises three foundational strategic themes: Enhancing Education Innovation & Leadership; Increasing Research Excellence; and Strengthening Community and Culture. E&E dovetails neatly with all three of these priority areas, with a particular focus on building a culture of thriving enterprise and engagement, working together with industry, business, and academic partners.

The Department has already made progress, building a strong foundational culture of enterprise and engagement, upon which we will continue to increase our relevance and our value to the wider communities with which we work.

We have strong partnerships already with public, private and third sector organisations, and are well-placed both to grow these partnerships and build new collaborations over the coming years.

As an example, our AWS accelerator will be expanded to the new BSc in AI, and there are plans in place to ensure all eligible students have access to a KEP by academic year 2027-28. Additionally, we work with many different stakeholders in the UK and beyond, across multiple projects.

Concurrent with our partnership work, the future of our Executive Education offer is looking bright. Growth in this area is a key aspiration for us. We remain focused on finding new and innovative ways to combine our research and pedagogic expertise for the betterment of the industries and communities we work with.



7.0 Get involved

As you will have read, the Department actively promotes innovation, impact creation, and knowledge and technology transfer through multiple instruments, which includes consultancy, executive education, industrial projects, and student-led startups.

Now is the time for you to get involved.

Join our Industry Advisory Board (IAB) – visit: kcl.ac.uk/informatics/engagement/industry-advisory-board

Collaborate on a Knowledge Exchange Project (KEP) – visit: kcl.ac.uk/informatics/engagement/knowledge-exchange-projects


Sign up to our Research, Enterprise & Engagement newsletter – email: informatics-enterprise@kcl.ac.uk

Enquire about co-sponsoring a PhD – email: informatics-enterprise@kcl.ac.uk

Want to be involved, but are unsure how? Start a conversation – email: informatics-enterprise@kcl.ac.uk







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