LondonDoctoralDesignCentre

LDoc Collaborative Doctoral Awards (CDA) 2018 – Call For Applications

The London Doctoral Design Centre (LDoc) is pleased to announce calls for applications for three new CDA projects to commence in September 2018. The projects are hosted between:

- Kingston University & Crafts Council
- Royal College of Art & IBM (covered in this document)
- University of Arts London & BOP Consulting

Royal College of Art & IBM

LDoc Introduction

Funded by the UK Arts and Humanities Research Council, LDoc is a collaboration between three internationally leading London based higher education institutions: the Royal College of Art (RCA), Kingston University (KU) and University of the Arts London (UAL) The Centre provides cross institutional PhD studentships and training, working in collaboration with key industry partners.

The Centre promotes and supports world-class Design Research Study and knowledge exchange. It offers a concentration of high-level skills and expertise in creative, critical and ethical thinking that prepares graduates to contribute to the creative and cultural industries and wider professional world.

LDoc embraces the breadth of Design Research Study in process, material, making, manufacture and theoretical practices, with particular expertise in: Design Innovation, Critical Design, Communication Design, Curation, Design and the Environment, Architecture, Design and Well Being, Digital Media, Performance, Interaction Design, Fashion Futures, Materials Futures, Service Design, Socially Responsive and Inclusive Design, Sustainability, and Vehicle Design.

LDoc offers a cross-institution specialist Design Research Training and Knowledge Exchange Programme, developed in response to the changing needs of an emerging generation of Design researchers both as pioneering and visionary individuals and as a growing cohort determining future research agendas.

LDoc generates access to the creative economy and wider cultural sectors through our Partners comprising key institutions, organisations, business and industry. This offers unparalleled opportunities for research, knowledge exchange and public engagement

Examples of current LDoc research projects can be found here.

Royal College of Art & IBM Introduction

IBM iX is one of the world's largest digital agency networks with multidisciplinary teams across the UK, Ireland & Europe with a team of several thousand people across Europe. IBM iX applies/combines design thinking with emerging technologies; working at the intersection of progressive strategy, creative vision and transformational technology in the realization of business opportunities. IBM iX has created a sustainable culture of designing for reinvention, anchored in people, places and practices. As a global leader, they work with key brands such as BP Castrol,

Boots, Kone, Electrolux, VW, Airbus, DWP, Nationwide Building Society, Wimbledon, Orange, El Corte Ingles, Alior Bank to help 'shape the businesses that will shape the world'.

IBM iX agrees on a set of measurements and metrics with their clients around what success looks like in the project. This may involve looking at an improved customer experience through measures such as NPS, cost reduction and efficiency, increases in brand advocacy, impact on sales/conversion. An example, work that IBM iX has done in the healthcare industry can be measured through the impact on successful diagnosis of treatment patterns.

IBM has legacy of putting design at the centre of its business strategy. This is evidenced in the early hiring of Eliot Noyes as IBM's first design director in 1956, followed by his commissioning of the series of innovative films and the IBM Pavilion by Charles and Ray Eames and the corporate logo revised by American designer Paul Rand. IBM's motto of 'design as good business' remains the basis for growth in the organisation exemplified by the company's recent expansion of its design, user experience and inclusion expertise. IBM iX extends this vision into the digital realm.

IBM iX brings to this project extensive knowledge in HCI and more recently, the development of digital-agency services operating at the intersection of strategy, creativity and technology for transforming businesses and leadership. The contact for IBM iX, Tracey Gilbert, is partner in the organization and IBM iX digital lead for Lloyds Banking Group. She brings extensive experience in project management, digital strategies, AI and interactive experiences. The project is also supported by Matthew Candy, Vice President, UKI & Europe Leader, IBM iX.

The proposed IBM iX/RCA partnership reflects a shared interest in shaping a vision on the future of design thinking by opening-up the new field of adaptive communication design and what this might bring to business innovation. Through investigating expressive, ethical and inter-subjective/objective qualities of conversational protocols, systems, interfaces and experiences, the project provides an opportunity to foreground the potential of communication design-led approaches to AI and to be a catalyst for new research collaborations that build upon the relationship.

The School of Communication at RCA holds a successful track record in working with industry partners on communication design-led projects; most notably the AHRC's Creative Exchange Hub. Staff in the School have experience of running successful international design projects with RKE industry partnerships and with industry-based supervisory experience with partners such as Microsoft. IBM has a long history of working with a plethora of academic institutes around the world, including many leading design schools in the US.

The Studentship Vision
This practice-led proposal seeks to explore how adaptive forms of design might address the complexities of conversational communication in digitally mediated contexts in people's public and private lives. Artificial (or Augmented) Intelligence (AI), for example, is increasingly integrated into our daily activities and interactions such as phone marketing and customer support, IoT devices and services, smartphone and personal computer virtual personal assistants, and online aggregated news generation. IBM predicts that 'the relationship between humans and computers will remain interactive and collaborative.' (IBM 2017) As the speed of technological innovation threatens to overtake the human-centred design of AI there is a sense of urgency for exploring the ways in which design might shape and inform new kinds of communication interactions and experiences. As such, the research asks: how do we approach the design of human and machine conversations in the near future?

The project aims to provide opportunities to explore through communication design practice, approaches and methods, the design of verbal and contextual conversations and to prototype the potential objects, contexts and/or experiences in which they may be embedded. This will be achieved

through a scoping of emerging contexts, forms of analysis, models, qualities and/or characteristics of human and machine conversational systems, and preliminary testing of protocols, interfaces and experiences.

Equally central to the research are the following sub-questions: how will the situations and contexts in which AI might be applied to human and machine conversations, interfaces and experiences address complex ethical, legal and policy challenges. For example, how do we design-in 'trust', 'empathy' and 'privacy' to human-machine conversations and the contexts in which they take place? In what ways might we design-in and maintain a human-centric approach? How might diverse sensory and neurological conditions be incorporated into the design of 'inclusive' conversational models, systems, agents or robots? And how might conversations remain human-driven; that is, fluid and responsive? What is the role of multimodality in new kinds of communication interactions, and how might conversational AI models accommodate non-verbal as well as verbal actions and cues? And finally, how should we design for multi-person/machine and social aspects of conversational interactions, characteristics and behaviours?

The scope of this PhD allows for a range of opportunities for the candidate to help shape research in the emerging field of adaptive communication. The partnership between the RCA and IBM iX will facilitate access to developing 'conversational AI' research within an applied context – specifically, with one of the UK's leading retail banks and the customer research lab. It is anticipated that the candidate will have relevant expertise for working at the intersection of linguistics, human behaviour and AI technology with a focus on design of the human experience.

IBM iX will gain in working with a PhD candidate and supervisors who are able to dedicate in-depth, high level research in relevant fields in which the organization is now investing. The candidate will inform new, novel and/or experimental ways of thinking and designing for Artificial Intelligence – a field in which IBM iX is a world leader. The PhD candidate will be exposed to the latest technological and design thinking in this world leading digital-agency. The candidate and will have the opportunity to engage with supervised 'live' projects in the field as part of the research process and have access to knowledge from IBM iX experts (in addition to the project's IBM iX supervisor).

Questions To Consider In Your Application

Context: What are the social, political and multi-cultural benefits of human and machine communication? What are the potential challenges in relationship to universal and personal concerns?

Method: What methods of inquiry, tools and processes might be employed to assist in addressing design for participation, inclusivity and multi-culturalism in human and machine conversations?

Methodology: What role might conversation theory and multimodality play in the development of new approaches to the design of communication interactions, and the understanding of associated characteristics and behaviours?

Others: What current research and communication design or cross-disciplinary practices might you draw upon to help inform the development of this project? How might you manage partnership expectations, knowledge exchange and collaboration in relationship to your own aims as a research student.

Proposed Supervisors and Subject Advisors

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Proposed Supervisors

Professor Teal Triggs will be the director of studies from the RCA whose background is in communication and visual design research, history and theory focussing on areas of identity, community engagement and design methods. She has extensive experience in supervising PhDs in Design.

Tracey Gilbert is a partner and Digital Leader at IBM iX, who brings to the supervisory team over 20 years of experience within the IT industry. She is also involved actively in mentoring schemes within the sector. At IBM, she leads on Digital Transformation and digital strategies with research focussing on the development of AI technologies in retail banking.

Proposed Subject Advisors:

Matthew Candy, Vice President, UKI & Europe Leader, IBM iX

Tom Simmons, Senior Tutor (Research), School of Communication

Application Process
Students wishing to apply for this CDA should first read through the project description and selection criteria in this document and the LDoc application documents. In selecting applicants, the panel will be looking for proposals that directly address the themes and concerns outlined.

All applications for this CDA must be received by RCA no later than **noon on Tuesday 28th November 2017**. Applications should comprise of an LDoc application and an online RCA application with supporting documentation. More information is available here.

This is a 2-step application process:

Stage 1
Applications will be considered by a panel convened at RCA and the selected applicant will be offered a place at RCA.

This offer will include full supervision, mentoring and support from both RCA and IBM for the duration of their studies.

Stage 2
The selected applicant, together with CDA applicants from UAL and Kingston University, will be submitted to the LDoc Selection Panel, where they will be considered for LDoc funding. The criteria for selection at this stage are in line with the standard LDoc selection process (please see the LDoc Application Student Guidance Notes for more information).

Notes
1. Applicants offered funded studentships will receive a full fee waiver from their university and, where eligible, an AHRC stipend (for 2017/18 this was £16,553 for full time students).
2. LDoc CDA Studentships are further supported by an additional payment of £500 per annum to cover travel and expenses incurred through the partnership.
3. Full Time and Part Time (50% FTE and above) applications will be considered.

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Please Note

Applicants must be aware that success in stage 1 of the process (the offer to pursue the project at RCA) does not guarantee LDoc funding, but does guarantee supervision, mentoring and support from RCA and IBM.

Submission Requirements

- Completed LDoc application form, outlining your proposal in answer to this CDA
- Copies of your transcripts or certificates
- Two references (to be sent directly by your referees)
- Equal Opportunities Monitoring Form
- Completed RCA online PhD application and supporting documentation

Application Timeline

Applications open:	Monday 16th October 2017
Application deadline:	Tuesday 28th November 2017
Stage 1 successful applicant confirmed:	Friday 8th March 2018
Stage 2 funding outcome:	Friday 4th May 2018
Studentship begins:	September 2018