

## Academic Role Profile

### Addendum

This document provides additional information relating to both specific aspects of the post/Faculty and any post specific person specification criteria. The information contained within this document should always be read in conjunction with the accompanying generic Job Purpose.

<b>Job Title:</b>	Lecturer/Senior Lecturer/Reader in AI for Process Engineering
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### Surrey Institute for People-Centre AI (PAI) appointment

#### Faculty School/Department(s) for collaboration:

Department of Chemical and Process Engineering (FEPS), Department of Computer Science (FEPS), Centre for Vision, Speech and Signal Processing (FEPS), Department of Mathematics (FEPS), School of Computer Science and Electronic Engineering (FEPS)

#### Job Summary/Purpose

The appointee will be expected to lead research, collaboration and project grant applications in AI and AI-domain collaboration aligned with the PAI Institute research strategy in People-centred AI. The post holder will establish and lead a portfolio of research, in collaboration with domain experts across the University.

The appointee will teach in the Department of Chemical and Process Engineering and/or the School of Computer Science and Electronic Engineering at both undergraduate and postgraduate level in both his/her specialist areas in addition to general contribution with the Department programmes. The post holder will also contribute to leading and delivering teaching in cross-University AI programmes at postgraduate level.

#### Person Specification AI

- Research leadership in AI, machine learning, data science, computer vision, audio-visual machine perception and/or natural language processing, and digital signal processing.
- A strong research and publication record.
- Experience in developing research proposals and securing research income together with supervising postgraduate research students.
- Demonstrated track-record of successful research leadership and collaboration.
- Familiarity with development, delivery and assessment of programme units.
- Experience of working with industry and other professional bodies.
- Excellent presentation, communication and interpersonal skills.
- Experience and potential for independent and collaborative research leadership.

#### Person Specification AI-Domain

Expertise in one or more of the following:

- Process (and Information) Systems Engineering;
- Digital manufacturing and digital production processes;
- Process automation, optimisation and machine learning;
- Process modelling and simulation
- Smart processes and Industry 4.0

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### Person Specification

This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role. This is in addition to the criteria contained within the accompanying generic Job Purpose.

	<b>Essential/ Desirable</b>
A higher research degree (PhD)	E
Internationally Excellent research performance (continuing publication record, and evidence of actual/potential ability in external research grant income generation)	E
Strong publication record with a track record of publishing in high quality (such as upper quartile) journals.	E
Excellent communication, inter-personal and networking skills.	E
Excellent organisational and project management skills	E
Potential and willingness to develop a track record in academic leadership	D
Demonstrated ability to successfully supervise doctoral students	D
Evidence of high-quality teaching	D
Evidence of scholarly contributions to conferences, professional meetings and societies at an international level, and evidence of achievements in other external activities at an international level	E

### Key Responsibilities

This document is not designed to be a list of all tasks undertaken but an outline record of any faculty/post specific responsibilities (5 to 8 maximum). This should be read in conjunction with those contained within the accompanying generic Job Purpose.

#### Main Responsibilities/Activities

- Contribute as a Principal Investigator of the AI Institute to establishing and leading pan-University research in People-Centre AI for the benefit of people and society in collaboration with Department of Chemical and Process Engineering domain expertise.
- Develop and lead a research portfolio in the area of AI and AI-domain collaboration.
- Contribute to and lead teaching within at undergraduate and postgraduate level.
- Lead a programme of research by managing associated financial/physical resources and recruiting/supervising/guiding/mentoring the work of staff and postgraduate students in own specialist subject area.
- Sustain a strong track-record of publication of high-quality research findings in appropriate primary journals and international conferences.
- Maintain a good level of research funding; contribute to planning and coordinating large multi-disciplinary or multi-Faculty bids involving collaborative groups.
- Enhance reputation in own subject area by engaging in external activities at national level such as contributions to professional networks, meetings, conferences, societies, professional and/or government bodies, editing/refereeing journals and papers.
- Perform administrative duties throughout the Institute/Department/Schools as are recognised by the University in roles commensurate with the remit of an academic (ie, Director of Research, Director of Studies, Programme Director and Examinations Officer) and which contribute to the general life and work of the University.

**N.B. The above list is not exhaustive.**

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