



UNIVERSITY OF LINCOLN  
JOB DESCRIPTION

<b>JOB TITLE</b>	Professor in Computer Science (Medical Imaging)				
<b>DEPARTMENT</b>	School of Computer Science				
<b>LOCATION</b>	Brayford Pool				
<b>JOB NUMBER</b>	COS145	<b>GRADE</b>	SMG	<b>DATE</b>	March 2015
<b>REPORTS TO</b>	Head of School				

**CONTEXT**

The University of Lincoln is an ambitious institution with high aspirations and a rapidly improving profile. Its strategy is to combine outstanding, high-impact research with a superb student experience. It has gone beyond research-engaged teaching and learning by committing to its "student as producer" initiative.

The School of Computer Science has an excellent reputation both in the quality of its published outputs and in generating external income to fund a range of innovative and impactful projects. The School's research is largely driven and managed through three Research Centres that specialise in computer vision, robotics and autonomous systems, and in social computing. The Laboratory of Vision Engineering, led by Distinguished Professor Nigel Allinson MBE, is externally recognised for the quality of its work, most recently by winning an IET Innovation award for work undertaken in proton beam treatment of cancer. Other current projects include medical image analysis for the treatment of diabetic retinopathy, personal long-term health care monitoring, novel solid-state imagers, embedded vision systems, and proton and other radiotherapies.

Alongside the School of Computer Science, the College of Science comprises Schools of Life Sciences, Mathematics, Physics, Chemistry and Engineering. Inter-disciplinary work is further facilitated through the University's Institute of Health. This provides a network of relevant subjects across Colleges and subject disciplines and has links to clinicians and local health providers.

**JOB PURPOSE**

A Professor will have established and sustained a substantial research profile and be known internationally in their field, demonstrating effective academic leadership in research and in curriculum / discipline development with their research work informing their teaching.

A Professor is a leader within the University involved in service beyond their School / College. They provide academic leadership within the subject area, establishing and maintaining an internationally-competitive research environment through the production of high quality work, income generation, research student supervision and leadership of more junior academic staff.

Professors contribute to academic leadership and the development of strategy at the School and College level.

## KEY RESPONSIBILITIES

### Research

To enhance the research profile of the School or College, including:

- Maintain and enhance a substantial research profile of international quality and standing that has a significant impact on their academic field and beyond
- Lead on aspects of the development of research within the School / College / University, such as:
  - Leading and managing a research centre or research group
  - Leading the School's response to major research initiatives (e.g. REF)
  - Co-ordinating a significant area of School research activity
  - Chairing relevant College or School committees
  - Representation of the School and /or College on University committees and working groups
- Attract external, significant and sustained research funding from various sources, including research councils, charities, government-funded bodies and European Union and overseas bodies, to support and develop research
- Provide supervision and mentoring to academic and research staff, supporting them in developing a funding profile, the development of their personal research track record and research impact
- Lead and manage collaborative research projects
- Support the School's international development, including forging international research links
- Attract and supervise postgraduate research students
- Develop research through "impact" activities, e.g. patenting, commercialisation, influencing policy or public or professional discourse

### Teaching and Learning

To contribute to the subject portfolio of programmes, including postgraduate/research degrees by:

- Undertake teaching at undergraduate and/or postgraduate levels and carry out all related activities achieving good levels of student progression and satisfaction.
- Lead on research-engaged teaching in subjects and areas related to the post holder's research.
- Lead on improved approaches to teaching and learning, informed by the research and engagement with practice, within their own subject area(s) and across the Department/School.
- Collaborate with colleagues in curriculum development, the advancement of the discipline within the University, academic administration including contribution to programme and/or unit management duties.
- Contribute to the development and implementation of learning and teaching strategies within the School and across the College / University.
- Supporting students undertaking doctoral research in their subject and supervising them to completion.

### **External Engagement and Enterprise**

- Attract external funding through enterprise activities including applied research, consultancy and knowledge transfer activity where appropriate, to achieve income diversification and improve academic reputation.
- Engage with external employers and stakeholders on applied and related work and to improve the student experience.
- Lead on and mentor colleagues on knowledge exchange activities and projects such as Knowledge Transfer Partnerships.
- Represent the School and University on external practitioner, employer, and policy bodies and networks such that the interests and strategies of the University are advanced.
- Support and enable the development of academic and related (e.g. policy) partnerships and linkages that further the academic development of the School and the University's strategic plan.
- Active involvement in/with academic professional bodies.

### **Other Duties**

- Support the Head of School in the management and direction of the School, as appropriate and as agreed with the Head of School.
- Contribute to and support the University's strategy and strategic plan.
- Contribute to the efficient administration, organisation and development of research in the School or College.
- Participate in and, where appropriate, convene relevant research-related groups/committees in the School or College.

**In addition to the above, undertake such duties as may reasonably be requested and that are commensurate with the nature and grade of the post.**

## ADDITIONAL INFORMATION

### Scope and dimensions of the role

The role of Professor is key to the academic, and particularly research, development and performance of the University. Professors are expected to have an international reputation in their area(s) of research, and also to mentor and nurture colleagues to achieve their personal research objectives and goals. They are also expected to engage in external networks in their area(s) of expertise and to generate income through research and other externally-supported projects. Engagement with practice, enterprise, innovation and employer engagement are closely associated with the research remit of the Professor, reflecting the University's wider strategic objective of being a relevant research-engaged institution.

An important part of the role is improvement of the research culture, including research leadership within the School and College. Professors at the University of Lincoln are academic leaders stimulating improvements in research and practice in academic matters related to teaching, learning and enterprise.

Although based in a specific School, the expectation is that Professors will contribute fully to the academic and intellectual environment of the University and its activities, including for example the Lincoln Academy.

The exact balance of duties will be agreed with your line manager depending on expertise, interest and the strategy of the University on an annual basis.

### Key working relationships/networks

Internal	External
<ul style="list-style-type: none"> <li>• Pro Vice Chancellor and Head of College</li> <li>• Head of School</li> <li>• Other Professorial staff in the School and College</li> <li>• Other academics inside/outside the School and College</li> <li>• Researchers and research students</li> <li>• Research and Enterprise</li> <li>• Service staff</li> </ul>	<ul style="list-style-type: none"> <li>• External agencies</li> <li>• External Examiners</li> <li>• Funding bodies e.g. Research Councils</li> <li>• Professional and Regulatory Bodies, Educational establishments and organisations e.g. other universities</li> <li>• Research collaborators and partners</li> <li>• Overseas partner institutions</li> <li>• Accrediting bodies</li> </ul>



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PERSON SPECIFICATION

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<b>Selection Criteria</b>	<b>Essential (E) or Desirable (D)</b>	<b>Where Evidenced Application (A) Interview (I) Presentation (P) References (R)</b>
<b>Qualifications:</b>		
A postgraduate qualification (or equivalent) in relevant discipline	<b>E</b>	<b>A</b>
HE teaching qualification (HE PGCE or HEA fellowship) OR a commitment to complete one	<b>E</b>	<b>A</b>
<b>Experience:</b>		
Proven track record of internationally significant research publications or equivalent outputs	<b>E</b>	<b>A/I</b>
Broad teaching experience at undergraduate and taught postgraduate level	<b>E</b>	<b>A/I</b>
Proven track record of sustained income generation to support research work	<b>D</b>	<b>A/I</b>
Experience of leading a research team	<b>D</b>	<b>A/I</b>
Experience of leadership and administrative management in HE	<b>D</b>	<b>A/I</b>
Experience of supervising research students to completion and/or supervision of research staff	<b>D</b>	<b>I</b>
Experience of efficient administration and management of research and/or teaching programmes	<b>E</b>	<b>A/I</b>
<b>Skills and Knowledge:</b>		
Ability to develop and lead a portfolio of research projects	<b>E</b>	<b>A/I</b>
Ability to lead and motivate others	<b>E</b>	<b>I</b>
Excellent communication skills both written and verbal	<b>E</b>	<b>A/I</b>
Extensive knowledge of the HE sector	<b>E</b>	<b>A/I</b>
Ability to develop and maintain an effective professional network and engagement with key agencies	<b>E</b>	<b>A/I</b>
Able to apply research to teaching and learning	<b>E</b>	<b>I</b>
Excellent organisational skills	<b>E</b>	<b>I</b>
Able to build effective working relationships with a wide range of staff and external agencies	<b>E</b>	<b>I</b>
<b>Competencies and Personal Attributes:</b>		
Able to lead and to work as part of a team	<b>E</b>	<b>I</b>
Initiative and independence in thinking/approach	<b>E</b>	<b>I</b>
High level of motivation	<b>E</b>	<b>I</b>
Strategic thinking	<b>E</b>	<b>I</b>
<b>Business Requirements:</b>		
Ability and willingness to travel on School, College or University business, including overseas	<b>E</b>	<b>A</b>

**Essential Requirements** are those, without which, a candidate would not be able to do the job. **Desirable Requirements** are those which would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements.

<b>Author</b>	DC	<b>HRBA</b>	HDR
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