UNIVERSITY OF LINCOLN
JOB DESCRIPTION

<table>
<thead>
<tr>
<th>JOB TITLE</th>
<th>Professor/Director of Centre for Defence and Security Artificial Intelligence</th>
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<tbody>
<tr>
<td>DEPARTMENT</td>
<td>College of Health and Science / School of Computer Science</td>
</tr>
<tr>
<td>LOCATION</td>
<td>Lincoln Campuses</td>
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<tr>
<td>JOB NUMBER</td>
<td>CHS001</td>
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<tr>
<td>GRADE</td>
<td>SMG</td>
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<tr>
<td>DATE</td>
<td>May 2023</td>
</tr>
<tr>
<td>REPORTS TO</td>
<td>DPVC College of Health and Science</td>
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</tbody>
</table>

CONTEXT

The role holder will be Director of the newly-established Centre for Defence and Security Artificial Intelligence (CDSAI), and Professor of Artificial Intelligence in ISTAR (Intelligence Surveillance Target Acquisition and Reconnaissance).

Defence and Security is one of the University’s five priority areas for research growth, aligning with our regional role. The new Centre will become a nationally-leading contributor to research into AI and data analysis for application in the Defence and Security sector (in particular, for ISTAR) and decision-support.

The University has strongly-established capacity in autonomous systems and machine learning, organised through the Lincoln Centre for Autonomous Systems. CDSAI will be a separate entity although it is anticipated that some academic members will undertake research activities in both. The University also has broader research interests in Defence and Security, and it is intended that the Director and Centre will play a convening and coordinating role for wider activity.

The Centre will develop technologies that are essential to national security, within a framework (technological, operational and ethical) that ensures that the technology is reliable, predictable, and operates within known and specified parameters that maintain appropriate control of activity. A particular focus will be autonomous operation and its interaction with predictability and control.

The University’s associated Lincoln Science and Innovation Park (LSIP) is home to multiple Defence and Security organisations, and it is expected that joint venture activities with existing and new tenants will be increased.
### JOB PURPOSE

To establish and grow the Centre for Defence and Security Artificial Intelligence. The University will pump-prime the new Centre at start-up; the Director will secure external funding to grow the Centre (in particular, research grants for project work, consultancy and – if appropriate – educational contract income. In the medium term this will include substantial grant income for core activity funding and/or capital investments.

To establish strong collaborative relationships with external stakeholders, including Defence and Security regional and national agencies (in particular, the RAF and Defence Intelligence).

To coordinate Defence and Security research and knowledge exchange activity across the University, including challenge-based and interdisciplinary research.

To maintain a strong personal research profile in AI applied to Defence and Security challenges, particularly in ISTAR, including research outputs, grants and impacts.

To provide academic leadership and mentoring to academic members of CDSAI, and line management to academic and/or professional service colleagues reporting directly into CDSAI.

To contribute to the improvement of the wider research culture, including within the School and College.

To play a collaborative leadership role in developing the wider Defence and Security portfolio of the University, including in teaching and learning.

To develop and maintain a strategy and Business Plan for CDSAI, and to secure approval for, and report on progress against, the strategy and plan.
KEY RESPONSIBILITIES & ACCOUNTABILITIES

Management of the Centre for Defence and Security AI

- Be responsible for the overall management and strategic direction of CDSAI, including the creation and monitoring of the Centre’s business plan
- Line management of staff directly assigned to the Centre as well as overseeing the research activities of academic members of the Centre;
- Undertake recruitment of Centre staff and scoping of roles associated with the Centre;
- Oversee the promotional aspects of the Centre, including the website; liaising with the internal PR and communications teams over research-related website and content, as well as press opportunities;
- Management of the Centre’s budget and resources;
- Prepare reports on the Centre’s activity and success for consideration by the Management Board and University;
- Membership of committees and/or working groups, as appropriate.
- To ensure that CDSAI complies with relevant government and agency requirements relating to confidentiality, security and clearances.
- Liaise with relevant external, national/regional and international agencies/organizations/groups/individuals, including Dstl, DASA and DIANA.

Oversight of Defence and Security Research and KE

- Provide visible and effective academic leadership at a university-wide level around Defence and Security related research and knowledge exchange;
- Advise senior leadership on priorities for investment and development in Defence and Security research and other educational activities;
- Contribute to establishment and maintenance of key relationships with external Defence and Security stakeholders, including the Armed Forces, government agencies, regional development agencies and Defence and Security sector companies.
- Act as convenor for internal Defence and Security research activities;
- Liaise with Global Opportunities over research-related partnerships;
- Ensure that the CDSAI works closely with other Institutes and Centres within the University, and with Colleges;
- Contribute to broader University strategy to grow Defence and Security activities including in educational contract and standard taught provision.

Research

- Maintain an internationally excellent track record in research outputs in Artificial Intelligence applied to Defence and Security challenges in ISTAR, suitable for submission to REF or successor audits;
- Generate significant research impacts (e.g. patents, licenses, consultancy, commercialization, policy or practice influence);
- Lead and manage collaborative research projects;
- Recruit and supervise postgraduate research students;
- Enhancing the research environment of the University through wider engagement at College/University level, chairing external bodies, organising conferences and senior engagement with major stakeholders;
- Coaching and mentoring other colleagues in the development of their research profiles.
Teaching and Learning

Professors are expected to contribute towards teaching delivery and the creation of an engaging and innovative teaching environment that supports effective student learning and a high quality student experience.

Professors are expected to contribute to the subject portfolio of programmes, including postgraduate/research degrees by:

- Undertaking teaching and carrying out all related activities, achieving sustained levels of student progression and feedback
- Leading on research-engaged teaching in subjects and areas related to the post-holder’s research and developing initiatives based on feedback which evidences impact
- Leading on improved approaches to teaching and learning, informed by pedagogic research and engagement with practice, within their own subject area(s), across the Department/School and ideally beyond the University
- Collaborating with colleagues in curriculum development and the advancement of the discipline within the University and disseminate best practice in teaching and learning
- Conducting academic administration, including contribution to programme and/or unit management duties, as appropriate
- Contributing 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.

Citizenship

- Contribute to and support the University’s strategy and strategic plan with leadership of activities contributing to general university life e.g. open days, alumni events, mentoring schemes, assisting professional services, working with stakeholders, outreach activities
- Participate in and, where appropriate, convene relevant related groups/committees in the School or College, as well as leadership/membership of committees/groups contributing to university life
- Contribution to the future development of the University and support the University’s wider social, cultural and economic development of our region, our ‘civic’ mission with engagement with/leadership of external partnerships contributing to the civic mission of the University.

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.

Key working relationships/networks

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<tr>
<th>Internal</th>
<th>External</th>
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<tbody>
<tr>
<td>PVC Head of College</td>
<td>Funding bodies e.g., Research Councils, DASA</td>
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<tr>
<td>Deputy PVC College of Science</td>
<td>Defence and Security sector bodies, including the Armed Forces and specific relevant units, e.g. HQ ISTAR Force and RAF Digby</td>
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<tr>
<td>Head of School of Computer Science</td>
<td>Academic Research / Project collaborators, e.g. Dstl</td>
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<tr>
<td>DVC for Research and Innovation</td>
<td>Defence and Security sector companies</td>
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<tr>
<td>DVC Regional Engagement</td>
<td>Greater Lincolnshire Defence &amp; Security Network / Regional Defence &amp; Security Cluster</td>
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<tr>
<td>Dean of Research Environment</td>
<td>Lincoln Science and Innovation Park</td>
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<tr>
<td>Director of Research and Enterprise</td>
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<tr>
<td>College Director of Research</td>
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<td>Director of the Doctoral School</td>
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<td>University Defence &amp; Security Research Network</td>
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<tr>
<td>Academics</td>
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<td>Post-graduate Researchers</td>
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<td>PGR students</td>
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# UNIVERSITY OF LINCOLN
## PERSON SPECIFICATION

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## Selection Criteria

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<tr>
<th>Essential (E) or Desirable (D)</th>
<th>Where Evidenced Application (A) Interview (I) Presentation (P) References (R)</th>
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### Qualifications:
- PhD in relevant discipline
  
### Experience:
- A strong track record in leading funded research projects in the Defence and Security sector
- Research track record in Artificial Intelligence applications in ISTAR, data analysis or related areas
- Understanding of information advantage &/or decision support capability
- Experience of collaborative, preferably interdisciplinary, academic research
- A track record of leading activities that have significant impact beyond the University
- Proven track record of sustained income generation to support research work
- External and international research links, including collaborative research with commercial partners
- Experience of supervising research students to completion and/or supervision of research staff
- Experience of leadership and administrative management in HE

### Skills and Knowledge:
- Ability to lead and motivate others
- Excellent communication skills, both written and oral
- Ability to influence and persuade, strong liaison ability
- Extensive knowledge of the HE sector
- Ability to develop and maintain an effective professional network and engagement with key agencies
- Excellent organisational skills
- Ability to build effective working relationships with a wide range of staff and external agencies
- Ability to develop and lead a portfolio of research/educational projects
- Ability to apply research to teaching and learning

### Competencies:
- Flexibility and adaptability
- Highly motivated
| Self-motivated and a proactive problem solver | E | A/R |
| Ability to exercise discretion in dealing with confidential or sensitive matters | E | I/R |
| Initiative and independence in thinking/approach | E | I |
| Commitment to the subject area and the drive to improve | E | I |

**Business Requirements:**

| Commitment to work in the Defence and Security field nationally and internationally with Defence organisations, armed forces, security agencies, primes, SMEs and supply chain entities | E | A/I |
| Security clearance and/or background consistent with attaining security clearance | E | A/I |
| Ability and willingness to travel on School, College or University business, including overseas | E | A |
| Be able to work occasionally outside of normal University business hours | E | A |

**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.