*Faculty / Division: Engineering*

*School / Unit: School of Computer Science and Engineering and School of Civil and Environmental Engineering*

*Position Level: Level E*

*Position Number: 00080283*

*Position Title: Cisco Chair in Digital Transport*

*Date Written: 2019*

## ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia’s global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as ‘research intensive’ or ‘teaching intensive’. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition we are attracting the very best academic and professional staff to play leadership roles in our organisation.

## UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high performance culture. The behavioural expectations for UNSW are below.

Please refer to the UNSW Behavioural Indicators for the expectations of your career level E

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| A close up of a logo  Description automatically generated | Delivers high performance and demonstrates service excellence. |
|  | Thinks creatively and develops new ways of working. Initiates and embraces change. |
|  | Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes. |
| A close up of a logo  Description automatically generated | Values individual differences and contributions of all people and promotes inclusion. |
|  | Treats others with dignity and empathy. Communicates with integrity and openness. |

## OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

The School of Computer Science and Engineering (CSE) is the largest School in the Faculty of Engineering with over 3,400 students and 53 full time academic staff with an operating budget of over $20 million. CSE is one of the largest and most prestigious computing schools in Australia with the greatest impact on society. It offers undergraduate programs in Software Engineering, Computer Engineering, Computer Science and Bioinformatics, as well as a number of combined degrees with other disciplines. It attracts excellent students who have an outstanding record in international competitions. Our research mission is to be world-building, world-changing or world-leading in our research into new and exciting innovations with profound national and international impact. For further information about the School, please visit <http://www.cse.unsw.edu.au/>

The School of Civil and Environmental Engineering has 48 full time academic staff, 30 professional and technical staff and 80 research only appointments. The School’s mission is to develop well-educated graduates with the essential skills, attributes and knowledge that will enable them to practice as professional civil or environmental engineers; and to conduct research and development of international distinction to meet the needs of the discipline, industry and society. For further information about the School, please visit <http://www.civeng.unsw.edu.au/>

The role of Professor and Cisco Chair in Digital Transport is a joint appointment in the School of Computer Science and Engineering and the School of Civil and Environmental Engineering. The role of Professor is a continuing position, and the role of Cisco Chair in Digital Transport is for an initial three-year period.

The Cisco Chair in Digital Transport has been established through funding from Cisco, and is a key role in building, re-enforcing and extending a rich and longstanding partnership between UNSW and Cisco.

## RESPONSIBILITIES

The specific responsibilities of this role include:

* Highly visible research leadership in the field of Digital Transport
* Academic leadership in programs associated with Innovation Central Sydney, a joint venture between Cisco, Data61 and UNSW
* Actively and publicly engaging with Cisco on a range of activities to promote the Cisco-UNSW partnership including representing Cisco at up to five Cisco customer and/or media events per year. These events may include, subject to availability due to teaching, research and University leadership commitments: Executive Sessions (e.g. Strategic Advisory Board, Executive Collective), select customer Innovation sessions, internal Cisco sessions, select customer engagements across private enterprise and government, and media commentary as required.
* Providing ongoing reports and briefings to Cisco, its partners and clients
* Promote the Cisco and UNSW partnership in the Transport market where possible and relevant, at all public facing engagements as well as on public social and online forums.
* Building collaboration and collaborative research activities with Cisco, its corporate partners and with other relevant universities

An academic at Level E is expected to provide academic leadership and foster excellence in research, innovative teaching and professional activities in the area of expertise.

The role of Professor reports to the Head of School.

It is expected that the Level E academic will continue to make a distinguished contribution to their discipline and deliver satisfactory performance and leadership. Specific performance expectations will be set individually with the Head of School/Supervisor.

The specific duties of the Professor (Level E) include (but not limited to):

* Engage, lead and foster a culture of excellence in research and deliver outstanding research of international significance including attainment of significant competitive government and industry research funding and publication of outcomes in high quality research outlets.
* Provide excellent leadership of research projects and leadership of research teams.
* Deliver high quality teaching and student experience utilising sound pedagogical methodologies and innovative technologies and from time to time, deliver teaching across a broad engineering discipline.
* High quality supervision of honours and postgraduate research projects.
* Provide leadership in developing significant productive relationships and engagement with industry and the community, attract significant industry funding and participate in professional activities.
* Participate and provide leadership in community affairs in professional, commercial and industrial sectors.
* Work collaboratively with peers across the Faculty and UNSW in all aspects of academic endeavour and play a leading role in the mentoring of other staff.
* Play an active role in the maintenance and development of academic standards in the development of educational policy and curriculum areas within the discipline.
* High level contribution to development of policy and broad administrative functions within the School and/or University, course coordination, attending departmental, faculty or University meetings, involvement in Open days and recruitment activities and play a major role in planning and/or committee work or other duties as requested by the Head of School.
* Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.

## SELECTION CRITERIA

Applicants from industry and professional backgrounds should demonstrate their equivalent level of standing as demonstrated by professional experience.

**Professor**

* PhD in a related area.
* A distinguished record in research leadership with outcomes of high quality and high international impact with clear evidence of the desire and ability to continually achieve research excellence and deliver research leadership.
* Record of outstanding contribution to teaching and delivery of high quality and innovative teaching and student experience at both undergraduate and postgraduate levels.
* Record of experience in a range of transport modes including road, rail, ports and emerging areas such as MaaS and Connected Cars would be highly sought.
* Strong record of understanding technologies such as computer networking; IoT; data science; cybersecurity would be preferred.
* Demonstrated experience with/or collaborations on mobile networks, behaviour analysis, data analytics, distributed systems, human machine cooperation, Internet of Things (IoT), multi vehicle planning, network science, resource allocation, secure systems, trustworthy AI, transport modelling or visual analytics would be an advantageous.
* Outstanding record of recruiting and supervising high calibre students.
* Demonstrated leadership in building engagement and partnerships with the profession and industry.
* High level communication skills and ability to network effectively and interact with a diverse range of students and staff.
* Demonstrated ability to work in a team, mentor other staff, collaborate across disciplines and build effective relationships.
* Willingness to undertake any compliance and supervisor training as required.
* Ability and capacity to implement required UNSW health and safety policies and procedures.

**PRE EMPLOYMENT CHECKS REQUIRED FOR THIS POSITION**

Verification of qualifications

*It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.*