





CISCO CHAIR IN INTERNET OF THINGS

CANDIDATE INFORMATION BOOKLET



CONTENTS

Overview of La Trobe University	1
La Trobe Strategic Plan 2018-2022	2
Cisco	3
Cisco Partnership with La Trobe	3
La Trobe's College of Science, Health and Engineering	5
School of Engineering and Mathematical Sciences	6
Research	7
Rankings	8
About the position	9
How to apply	11
About Victoria and Melbourne	12



OVERVIEW OF LATROBE UNIVERSITY

In 1967, La Trobe University opened its doors with a founding mission: to serve communities through greater access to higher education. For more than 50 years, we've provided a pathway to success for people from all walks of life and continue to transform the lives of individuals and communities.

Of all the Australian universities, La Trobe is the most successful at combining accessibility with excellence. We've worked hard to develop a global reputation, expanding our reach to seven campuses across Victoria and New South Wales, and producing world-class research that addresses the major issues of our time. We now rank in the top 1.2 per cent of universities worldwide and rate well above world standard in 24 research disciplines.

We have a long tradition of public scholarship and contributing to the national debate on issues that matter. Our alumni community has experienced extraordinary success in government, industry and not-for-profit organisations.

As the digital economy and job landscape evolves, we are changing with it. We collaborate with industry to deliver a ground-breaking career-ready program and innovative new courses in emerging fields. Across our communities in Melbourne's north and regional Victoria, traditional jobs are being replaced by new technologies which brings associated disruptions. Populations are growing and demands on services will continue to increase. One of our key responses is the development of a world class <u>University City of the Future</u> at our 235-hectare Melbourne campus in Bundoora. This is the largest capital plan in the University's 50-year history and will create and drive long-term jobs, innovation and economic growth through an investment of approximately A\$5billion over 10 years. The new Research and Innovation Precinct, the largest of its kind in Victoria, leverages our world class expertise in the crucial areas of digital technology (including cybersecurity, internet of things (IoT), data analytics and artificial intelligence (AI), health and wellbeing (including digital health), agribioscience, and food and fibre capabilities. La Trobe University will be the engine room for economic development in Melbourne's north and the anchor for the **Plan Melbourne La Trobe National Employment and Innovation Cluster.**

La Trobe University also has four campuses strategically located in central and northern Victoria. With campuses in Shepparton, Bendigo, Wodonga and Mildura offering a 'sand-pit' for the application of new technologies and new ways of working with regional and rural Australians, we are ideally placed to service and support the workforce and research needs of our regional communities.

LATROBE STRATEGIC PLAN 2018 – 2022

La Trobe University released its five-year Strategic Plan 2018 - 2022 in November 2017.

The Strategic Plan is enabling us to lead the nation in redefining what a great university can look like in the modern era and will ensure we continue our proud tradition of service to the community. As well as pursuing academic excellence, La Trobe will continue to actively serve the communities in which its campuses are located.

This is reflected in La Trobe's mission and vision statements, and in the plan's four **core objectives:**

- an outstanding student experience
- student and graduate employability
- research excellence
- being the partner of choice for industry, education and the community

OUR MISSION

Advancing knowledge and learning to shape the future of our students and communities.

OUR VISION

To promote positive change and address the major issues of our time through being connected, inclusive and excellent.

OUR ENABLERS

- One university, many communities
- Operational excellence
- Revenue growth

OUR VALUES

Our early reputation as a radical and challenging institution continues to influence the way we enrich the experience of our students and engage with our partners and communities.

We continue to support access, diversity and inclusivity while undertaking world-class research that aims to address the global forces shaping our world and make a difference to some of the world's most pressing problems, including climate change, securing food, water and the environment, building healthy communities, and creating a more just and sustainable future. This approach is based on our values of:

- inclusiveness, diversity, equity and social justice
- pursuing excellence and sustainability in everything we do
- championing our local communities in Melbourne's north and regional Victoria
- being willing to innovate and disrupt the traditional way of doing things.

OUR CULTURE

La Trobe Cultural Qualities

Our cultural qualities underpin everything we do. As we work towards realising the strategic goals of the University, we strive to work in a way which is aligned to our four cultural qualities:



CONNECTED

We are **Connected:** Connecting the students and communities we serve the world outside



INNOVATIVE

We are **Innovative:** Tackling the big issues of our time to transform the lives of our students and society

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ACCOUNTABLE

We are Accountable: Striving for excellence in everything we do. Holding each other to account, and working the highest standards



CARE

We **Care:** We care about what we do and why we do it, because we believe in the power of education and research to transform lives and global society



CISCO

Cisco is the worldwide technology leader that has been making the Internet work since 1984.

Its people, products, and partners help society securely connect and seize tomorrow's digital opportunity today. An integral part of our culture is creating long-lasting customer partnerships, working together to identify our customers' needs and provide solutions that fuel their success.

CISCO PARTNERSHIP WITH LA TROBE

Cisco and La Trobe University have enjoyed a strategic alliance since 2017, sharing a common vision to embrace technology and innovation to provide students with outstanding experiences and outcomes, and researchers with new opportunities to help solve some of the world's most pressing problems.

The goals of our partnership include:

- · improving educational outcomes at all levels
- addressing the skill and capability gaps associated with the digital economy
- enabling innovation and entrepreneurship through the use of technology and collaboration to drive economic development, with a particular focus on providing the skills and technology to support the transformation to a knowledge economy

There are five key components to our partnership, namely:

- 1. research and innovation
- 2. teaching and learning
- **3.** digital campus
- 4. pathways
- 5. reputation building and sharing



Research and Innovation

Through a dedicated focus on research and innovation, Cisco and La Trobe aim to support the scaling and acceleration of innovation, detect and address security vulnerabilities in IoT, support business models to keep pace with technological change and ensure industry networks are MNC-focussed.

The establishment of a Cisco Research Chair in IoT is a key initiative to support this work, as well as engaging in collaboration with other partners and institutions, and exploring the establishment of an Innovation Central presence at La Trobe to change and accelerate the way innovation is driven in partnership with industry.

Teaching and Learning

Cisco and La Trobe are working together to improve La Trobe's teaching and learning environments, including through a showcase 'Smart Classroom' and adopting new modules of the Cisco Networking Academy program. We are also engaging with the Victorian Government to help teachers build the skills and capabilities required to bring digital technologies to their classrooms.

Together, we want to ensure that young people and students – no matter their choice of profession – enter the workforce with career-ready digital and innovation skills.

Digital Campus

Cisco and La Trobe will activate and transform La Trobe University's campus network into a connected 'Digital Campus', trialling technologies including IoT, cyber and intent-based networking and finding ways to improve the student experience and engagement outside the classroom. This supports La Trobe's A\$5billion transformation into a 'University City of the Future' while ensuring connectivity with our regional campuses and communities.

Pathways

Through our partnership, La Trobe University will play a more prominent role in supporting and delivering Cisco's Digital Schools Network, a collaboration platform designed to transform the way educators teach and students learn in K-12 systems for schools in the Asia-Pacific and Japan. The Digital Schools Network enables educators and students to connect and share lessons and resources within a secure collaboration space.

Reputation building and sharing

Together, Cisco and La Trobe will showcase our jointly developed assets to demonstrate innovation in practice and what is possible. We will participate in and host study tours, share our knowledge, and collaborate with industry, researchers and others from universities and other institutions across Australia.



LATROBE'S COLLEGE OF SCIENCE, HEALTH AND ENGINEERING

The College of Science, Health and Engineering comprises 9 schools and 19 departments across La Trobe's multi-campus operations, offering general and specialist undergraduate, postgraduate and higher degree research courses.

Our world-leading staff are dedicated to achieving significant educational and research outcomes in their fields and our degrees are linked to emerging trends and are designed to prepare students to work in changing environments. We deliver a wide range of general and specialist courses that challenge students to expand their life and learning experiences.

We are engaged in both regional and metropolitan communities, with our courses offered across our campus network in Albury-Wodonga, Bendigo, Bundoora, Melbourne City, Mildura, Shepparton and Sydney.

Our students have access to world-renowned research facilities including the A\$100 million La Trobe Institute for Molecular Science (LIMS) and the A\$288 million Centre for AgriBioscience. Our world-class researchers work in collaboration with industry partners and multiple disciplines across the university to deliver significant research outcomes across a number of key areas:

- building healthy communities
- · securing food, water and the environment
- digital and enabling technologies
- sport, exercise and rehabilitation
- transforming human societies
- understanding disease

Our researchers work in an environment which encourages innovative solutions and opportunities for research breakthroughs across important scientific and social issues. They hold significant strength and expertise in:

- environment
- rehabilitation and exercise
- brain, mind and behaviour
- food and agriculture
- infection, immunity and cancer research

SCHOOL OF ENGINEERING AND MATHEMATICAL SCIENCES

SCHOOL VISION

To be a leader of expertise in technology, engineering and mathematics for innovative education and research that challenges the status quo and transforms our communities.

STRATEGIC INTENT

To be a leader in STEM education and research by:

- enabling our students to flourish in a rapidly evolving digital world
- positioning our workforce and creating a work environment in which staff willingly bring their best and strive for excellence
- building strong partnerships with regional, national and international communities and industry
- producing ground-breaking research that changes current practice
- nurturing cross-disciplinary collaborations that enhance teaching and research outcomes

The School of Engineering and Mathematical Sciences brings together interconnected discipline areas located within three departments: Department of Computer Science and Information Technology (CSIT), Department of Engineering, and Department of Mathematics and Statistics. The School also hosts two Research Centres: Centre for Technology Infusion (CTI) which aims to deliver technology translation and industry impact in engineering and technology, and the Optus La Trobe Cybersecurity Research Hub which focuses on research and training in cutting-edge cybersecurity technologies and innovation.

In the last five years, the School has undergone a major strategic repositioning with the development of new programs and the strengthening of the School's research focus areas. Over this period, the School has introduced a number of new programs in the areas of cybersecurity (computer science, law, and business operations) and data science. Another two new programs will be introduced in 2020: Master of Internet of Things (IoT) and Master of Artificial Intelligence (AI). These new programs will form a coherent focus and direction for the School in producing graduates who are ready to tackle the new technological challenges of this century. The School's research continues to flourish in the areas of smart sensor applications, artificial intelligence and data science, cybersecurity, network engineering, and intelligent transport systems amongst a diverse range of other research expertise and endeavours. We are also focusing on building and strengthening our partnerships with industry, both locally and internationally.

In the recent 2018 ERA (Excellence in Research for Australia) assessment, approximately 80 per cent of the fields submitted by the School achieved a rating of "4" (above world standard) or "5" (well above world standard). None of the areas within the School received a rating of less than "3" (world standard). This has been a significant achievement which the School aims to continue to foster and cultivate.

The CSIT Department, particularly at the Bendigo campus, conducts ongoing research and development in the area of IoT through a number of project partnerships with local government, industry, and the community. The City of Greater Bendigo, in collaboration with the CSIT research team at Bendigo, received the national prize in the iTnews Benchmark Awards for 2019 in the local government category for building IoT infrastructure across the City. Because of this partnership and the support from local government and the community, the new Master of IoT program will be offered at the Bendigo campus. This program will be supported by a number of external scholarships and Work Integrated Learning (WIL) placements in regional industries and organisations.





RESEARCH

Our research is among the world's best. We rank in the top 1.2 per cent of the world's universities.

Our research mission is to increase human knowledge and strive for a better society through engaged, impactful, outstanding research. Our research vision is to conduct research that is world class and transforms our communities, partners and collaborators, and for our graduates to be sought after for their ability to meet industry needs and adapt to a changing world.

We will deliver our research mission and vision by meeting the targets we have set for our core objectives of research excellence, unrivalled partner of choice, outstanding graduate researcher experience, and graduate researcher employability.

La Trobe University has a proud history of undertaking research to address pressing societal needs. We foster an aspirational and ambitious research and innovation culture. Our researchers are astute, ethical and engaged with their communities. Our strong drive, combined with our breadth of expertise, means that La Trobe University researchers are sought after for the understanding and impact they bring to pressing questions.

OVERVIEW

Research at La Trobe University is undertaken by more than 2500 academics and graduate researchers in our Departments, Schools, and Colleges at six campuses across Victoria. Much of our research takes place in Research Centres or is aligned with one of our Research Focus Areas: building healthy communities; securing food, water and the environment; enabling digital technologies; sport, exercise and rehabilitation; transforming human societies; and understanding disease.

Our research endeavours are supported by our world class research infrastructure and the funding we receive from our partners and grant agencies. Support is offered by our Graduate Research School, Research Education and Development Team, Research Office, Library, ICT and Offices of Research Development and Industry Engagement, to create a thriving environment for researchers at all career stages.

- La Trobe University researchers undertake work across a broad range of disciplines and are esteemed in their fields, winning prestigious awards and being elected to Learned Academies.
- La Trobe University's research activities put us amongst the world's best, ranked 317 in the Academic Ranking of World Universities.
- La Trobe's University City of the Future and the 48-hectare Research and Innovation Precinct and the organisations located there will form an integral part of our future expansion and provide ongoing opportunities for partnership and collaboration.

RANKINGS

QS WORLD UNIVERSITY RANKINGS BY SUBJECT

In the QS World University Rankings by subject 2018, La Trobe's Science, Health and Engineering College ranked:

- 39th in the world for sports-related subjects
- 59th in the world for nursing
- top 200 in the world for psychology
- top 250 in the world for agriculture and forestry
- top 300 in the world for biological sciences
- top 300 for pharmacy and pharmacology

EXCELLENCE IN RESEARCH FOR AUSTRALIA (ERA)

In the Australian Government's Excellence in Research for Australia (ERA) 2018 assessment, our College of Science, Health and Engineering achieved the highest possible rating of "well above world standard" (ERA 5) in broad fields of research for:

- physical sciences
- chemical sciences
- biological sciences
- agricultural and veterinary sciences

At the detailed field of research level, the College rated 'well above world standard' across 22 fields of research, including dramatic improvements in areas such as:

- soil sciences
- medicinal and biomolecular chemistry
- genetics
- cardiorespiratory medicine and haematology
- psychology
- civil engineering

The impact component of ERA required the submission of case studies, for which La Trobe achieved the highest possible impact rating across five broad fields of research including:

- environmental sciences
- agricultural and veterinary sciences
- medical and health sciences
- law and legal studies, and
- history and archaeology

QS WORLD UNIVERSITY RANKINGS BY SUBJECT

In the ShanghaiRanking's Global Ranking of Academic Subjects 2018, La Trobe ranked:

- 55th in the world and 11th in Australia for nursing
- 161st in the world and 11th in Australia for agricultural sciences
- top 200 in the world for life sciences
- top 300 in the world for psychology
- top 300 in the world for biological sciences

THEWUR 2019 BY SUBJECT

In the Times Higher Education World University Rankings for 2019, La Trobe ranked:

- In the 201-250 band in the listing of the top 500 and 9th in research for Australia for sports science
- In the 201-250 band in the listing of the top 500 and 15th in Australia for life sciences
- In the 201-250 band in the listing of the top 500 and 15th in Australia for biological sciences
- In the 201-250 band in the listing of the top 500 and 15th in Australia for psychology
- In the 201-250 band in the listing of the top 500 and 14th in Australia for other health

ABOUT THE POSITION

A Professor (Level E) teaching and research academic is expected to be an internationally acknowledged leader in their discipline or professional field. They will provide discipline leadership and foster excellence in teaching and research. They will design and lead curriculum development and teaching and conduct and publish, or otherwise disseminate, the highest quality and/or impact research/scholarship. They will also foster excellence in teaching and research/scholarship in that discipline or professional field at La Trobe and through relevant national and international external bodies. All Professors are members of the University's Academic Board and are expected to contribute to the leadership not only of their School and College, but also of the University as a whole.

CISCO CHAIR IN INTERNET OF THINGS – FULL-TIME, FIXED TERM

La Trobe University and Cisco signed a Collaboration Agreement in 2017. The Agreement committed each party to a range of collaboration initiatives which also includes input and advice into advanced networking and the IoT curriculum, interactive learning and teaching technologies, industry-integrated learning, and professional development programs.

One important component of the collaboration initiatives is the establishment of a Cisco Chair in IoT. It is envisaged that the Cisco Chair will be a prominent academic appointment within the School of Engineering and Mathematical Sciences (SEMS).

In recognition of the importance to La Trobe of the partnership with Cisco, this role will work closely with Cisco and its partners, including both industry partners and University partners outside Victoria.

Duties at this level may include:

Strategic leadership

- Conduct and lead innovative and high impact research at an internationally distinguished level and produce high quality publications resulting from that research.
- Obtain research income from a variety of sources, including nationally competitive grants, individually, and with other colleagues in the College/University and external partners.
- Provide leadership, foster excellence and the advancement of the research discipline.

- Contribute to broader leadership processes with the University.
- Build collaborative and sustainable relationships with, and act as expert advisor/consultant to industry and other external organisations, with a particular focus on Cisco and its industry partners as per the Cisco business duties described below.
- Promote and represent the University and discipline/profession by participating in appropriate local, national and international organisations and events.

Leadership and management of learning, teaching and student experiences

- Provide academic leadership in the cyber-physical systems area, particularly in IoT, at undergraduate and postgraduate levels, lead course-level curriculum design and lead in the development and implementation of other modules and nested programs, including articulations from TAFE institutes and micro-credentials with industry partners and industry associations.
- Develop, coordinate and teach subjects and courses which provide a high-quality learning experience that engage and motivate students, leading where appropriate.
- Encourage and promote a robust and innovative research culture at all levels within the University.
- Lead, mentor and develop the research performance of more junior colleagues within the School/College/University.
- Supervise Higher Degree by Research (HDR) students.
- Participate in community and professional activities related to the discipline, including involvement in commercial and industrial sectors where appropriate.
- Undertake other duties commensurate with the classification and scope of the position as required by the Head of School.



Cisco Business

- Represent 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 Thinkspace sessions, internal Cisco sessions, select customer engagements across private enterprise and government, and media commentary as required.
- Provide at least two reports per year in support of the Cisco business strategy.
- Establish a virtual facility at La Trobe University to:
 - Allow Cisco to access research, receive guidance and inform solutions to real-world problems in the field of the IoT that may apply to Cisco, other industry partners, other educational institutions, government agencies and Cisco enterprise customers.
 - Enable both Cisco and La Trobe University to work together with Cisco business customers to understand objectives and recommend solutions.
- Promote the Cisco/La Trobe University partnership in the IoT where possible and relevant, at all publicfacing engagements as well as on public social and online forums.
- Participate, where possible (subject to availability due to teaching, research and University leadership commitments), in opportunities to join Cisco business-sponsored national and international events and/or attend international visits with select customers.
- Provide two internal Cisco business executive session briefings per annum on topics such as trends, challenges and opportunities in the field of the IoT.

Selection Criteria

Essential

- A PhD in a relevant discipline or equivalent experience.
- Distinguished record of original, innovative and internationally recognised research and/or teaching, with evidence of its impact and significance. This should clearly identify the candidate as either an established global leader in cyber-physical systems and the IoT or a closely related discipline, and/or demonstrate the capacity to quickly establish the candidate as a global leader in the IoT.
- Demonstrated effective leadership and management experience in building and leading teams.
- Strong record of external research funding through competitive grants, contracts and/or consultancies; and the financial management of grants.
- Evidence of achievement in fostering, mentoring and supporting the development of others, including early career staff.
- A sustained record of successful PhD student supervision.
- Demonstrated evidence of and commitment to the highest quality teaching.
- Evidence of leadership in teaching and curriculum development.
- Excellent interpersonal skills, especially the capacity to work collaboratively and cooperatively.

Desirable

 Graduate Certificate in Higher Education or equivalent.



HOW TO APPLY

All applications should be submitted via latrobe.edu.au/jobs

When submitting your application, the following information is required:

CURRICULUM VITAE

Please include the following:

- Details of your education, professional training and qualifications with year of completion.
- A full list of publications and research grants.
- Positions you have held, including relevant dates, titles, responsibilities and key achievements.
- Other relevant information such as your contributions to professional associations and learned societies, and community activities.

REFEREES

- Provide full contact details for at least three referees who have agreed to supply confidential references if requested by the University.
- State your relationship to the referees and why they have been nominated to speak on your behalf.
- Referees will only be contacted after prior consultation with you.
- It is your responsibility to ensure referees are willing to provide reports when contacted.

VISION STATEMENT

Taking the selection criteria into consideration, provide a brief summary of what you will bring to this position (no more than four pages), taking into account your experience and achievements, your vision for the role and for the portfolio, and the processes you would use to implement this.

INDICATIVE COMMENCEMENT DATE

Candidates are asked to provide an indication of the earliest date on which they would be available to commence in the position.

As part of the application and appointment process, candidates may be requested to provide proof of their identity, undergo psychometric testing and give permission for verification of their tertiary qualifications and an Australian Federal Police check.

All La Trobe University employees are bound by the Working with Children Act 2005. If you are successful, you will be required to hold a valid Victorian Employee Working with Children Check prior to commencement.

LaTrobe University is a proud member of the Science in Australia Gender Equity (SAGE) Athena SWAN program to increase the number of women in science.

science.org.au/supporting-science/gender-equity



ABOUT VICTORIA AND MELBOURNE

EXPERIENCE MELBOURNE

Melbourne is the capital of the state of Victoria, and Australia's second largest city. It's a multicultural hub with 4.5 million people from more than 153 countries, it's one of the best sporting cities in the world, and it is Australia's art and culture capital.

Melbourne is a safe, well-serviced city in which to live and the main campus of the University at Bundoora is close to many world-class hospitals, schools, research centres, shopping centres, bike paths and parklands. People living in Melbourne enjoy affordable healthcare, world-class education, reliable infrastructure, business opportunities and a healthy environment – all of which are unrivalled anywhere else in the world. You'll find the world's masterpieces on the walls of the city's 100 plus galleries and some of the world's best examples of street art along its famous laneways. Melbourne's theatres and live venues stage blockbuster productions, international and local opera, ballet, comedy and live music by some of the world's most popular artists. Melbourne is also a UNESCO City of Literature.

When it comes to sport, Melbourne is a city like no other. Each year, the city hosts major international sporting events like the Australian Open Grand Slam tennis tournament, the Formula One Grand Prix, the Rip Curl Pro surfing championship, the Australian Masters golf tournament and the Melbourne Cup (horse racing). The city also hosts the Grand Final of Australian Rules Football every year, which includes a parade in the city. Melburnians love their food. Many of the world's top chefs have set up in Melbourne and you'll find just about every cuisine on the planet here: French, Italian, Spanish, Greek, Chinese, Malaysian, Indian, Thai, Japanese, Moroccan and plenty more.

More than 2500 festivals and events are held in Victoria throughout the year. Major events in the city include the Melbourne International Arts Festival, Melbourne International Film Festival, Melbourne International Comedy Festival and the Melbourne Spring Racing Carnival.

Find out more: liveinmelbourne.vic.gov.au/discover

VICTORIA: THE GARDEN STATE

Victoria is Australia's smallest mainland state – at 227 416 square km, it is about the same size as the United Kingdom. Once known as 'the garden state', it has many notable gardens and 36 national parks covering two and a half million hectares. Among the State's many attractions are the Great Ocean Road, where you'll see stunning coastal views and the world-famous Twelve Apostles, the Grampians and the High Country.

Find out more: visitvictoria.com



Disclaimer

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