## **Tenure Track faculty positions in Computer Science**

The School of Computing and Information Systems (SCIS) at the Singapore Management University (SMU) has several tenure track faculty positions, at all ranks, in the discipline of Computer Science & Engineering.

We strategically hire to build critical mass and innovative capability in our core research areas and integrative research domains. In particular, we are looking to significantly expand our faculty expertise in Cognitive Computing, Computational Neuroscience, Ethics and Trust in AI, Multimedia (3D Computer Vision/Graphics, Virtual/Augmented Reality, Metaverse), Human and Social Aspects of Software Engineering, Sustainable/Green Computing, System Security and Distributed System Security.

## OUR CORE RESEARCH AREAS

#### • Artificial Intelligence & Data Science

- **Data Management & Mining,** including databases; data mining; natural language processing; data visualisation and analytics; recommender systems; social sensing and activation.
- Decision Making & Optimization, including large-scale optimization and meta-heuristics; economic paradigms (game theory, mechanism design, electronic markets); agent modeling and simulation; agent planning, scheduling and decision support; agent learning and adaptation; reinforcement learning and inverse reinforcement learning.
- Machine Learning & Intelligence, including machine learning and adaptation; deep learning; computer vision; machine intelligence; explainable AI; cognitive/brain-inspired computing; human-centric AI; intelligent assistants; intelligence augmentation; human-in-the-loop AI.

## Human-Machine Collaborative Systems

- Pervasive Sensing & Systems, including sensing & sensor information processing; IoT and embedded systems; robotics systems; mobile and pervasive systems; context-aware and edge computing platform; embedded AI; cognition understanding.
- **Multimedia Systems**, including generative media; social media; multimedia search; computer graphics; augmented reality; virtual reality.
- **Human-Computer Interaction**, including accessibility; human-AI interaction; human-robot interaction; information visualization; collaboration systems; wearable computing.

#### Information Systems & Technology

- Software Engineering, including AI for SE; SE for AI; software analytics; formal methods; software testing; software maintenance & evolution; human-aspects in SE; engineering IoT, Cyber-Physical Systems & drones; sustainable SE.
- Cybersecurity, including decentralised/distributed trusted systems; biometrics; computer forensics; data, media content and related applications security and privacy; software and system security; information security and usability; information security economics and risk analysis, modeling & metrics.
- Information Systems Management, including economics of IT and management science; empirical methods, econometrics, and policy analytics; sharing economy and IT platforms; digitalisation and process transformation; fintech; marketing and healthcare IT; information security, technology innovation and IT impacts; interdisciplinary studies across the core areas.

## **OUR INTEGRATIVE RESEARCH DOMAINS**

- Urban Systems & Operations
- Active Citizenry & Communities
- Safety & Security
- Learning & Pedagogy

While we encourage and nurture applied research addressing real-world problems, we simultaneously cultivate and value big ideas, and research that is intellectually deep and thought provoking. Our faculty target their academic output primarily in the most-selective, academically prestigious venues. We want our faculty striving to create research outputs that advance thinking and scholarship in the core research areas, and also seeking real-world impact in the integrative research domains in "the world of business".

We offer extremely attractive salary and benefits that are usually superior to international competitive benchmarks.

# QUALIFICATIONS

We are continually on the lookout for outstanding faculty candidates at all levels:

- Fresh Ph.D. graduates
- Postdocs looking for a faculty position
- Ph.D. holders who are currently in industry but want to return to faculty and research work
- Mid-career or senior faculty

Tenure track faculty must have Ph.D. qualification in a relevant discipline (such as Computer Science, Computer Engineering and Information Technology) along with an outstanding research record.

Singaporeans selected for tenure track faculty positions may be considered for the Singapore Teaching and Academic Research Talent (START) Inauguration Grant. Details on the grant application procedure may be found here: <u>https://www.smu.edu.sg/moe-start/inauguration-grant</u>.

Interested candidates are invited to submit a cover letter (indicating which of the above Core Research Areas your research interest belongs to), curriculum vitae, research and teaching statements, three recommendation letters, and three samples of published work to:

Note: Please indicate your source type: <u>CRA/CRN</u> in your application.

#### SCIS Faculty Recruitment

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For more details, please visit our website: https://scis.smu.edu.sg/about/careers-opportunities/faculty-openings/tenure