SENIOR LECTURER – HUMAN COMPUTER INTERACTION

DEPARTMENT/UNIT	HCI and Creative Technologies
FACULTY/DIVISION	Faculty of Information Technology
CLASSIFICATION	Level C
WORK LOCATION	Caulfield campus

ORGANISATIONAL CONTEXT

The Faculty of Information Technology conducts a wide range of multidisciplinary research in Human-Computer Interaction and Creative Technologies, Artificial Intelligence and Dialogue Technologies, Data Science and Machine Learning, Cybersecurity, and Organisational and Social Informatics. Monash University is a multi-campus and multi-national university, with locations in Melbourne, Asia and around the world. Our research priorities in FIT are technically ambitious, expanding into new areas, and embedded in everyday life; see www.infotech.monash.edu.au/.

The **Human-Centred AI** group designs, builds, and evaluates state-of-the-art interface technologies. Our multidisciplinary interests span computer science and engineering, cognitive and learning sciences, communications, medicine and health, media design, and other topics. Our work is based on empirical science, statistics, deep learning and data analytics, and diverse HCI methods. The HCI group has partnerships with CSIRO-Data61, and an expanding collection of industry partners. The HCI area director is Professor Sharon Oviatt, an ACM Fellow and international pioneer in human-centred, mobile, and multimodal interfaces.

POSITION PURPOSE

The Faculty of Information Technology at Monash University is establishing a new group in Human Computer Interaction (HCI) and Human-Centred AI. The faculty position will be part of the rapid expansion of a multidisciplinary group with expertise in areas such as mobile, wearable and multimodal-multisensor interfaces, conversational dialogue interfaces, brain-computer and adaptive interfaces, education and health interfaces, data analytics for predicting user cognition and health status, adaptive interfaces, and other topics. Level C academics are expected to make contributions to teaching, research, and professional activities relevant to the profession and discipline. An academic at this level also plays a major leadership role in organizing and mentoring high-quality research and scholarship within the group, as well as playing key leadership roles within the faculty.

Reporting Line: The position reports to the HCI area director

Supervisory Responsibilities: This position would supervises 2-6 undergraduate students, graduate students, and postdoctoral fellows

Financial Delegation: Yes, in accordance with the University delegations schedule

Budget Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level C academic may include:

1. Conducting high-quality research appropriate to the discipline, including publications in world-leading conferences, journals and books

2. Establishing and managing successful research teams, research units, or centres, and fostering interdisciplinary research

3. Preparation and delivery of lectures and seminars, including assessment material

4. Coordination of teaching material, overseeing and/or delivery of tutorials, practical classes, demonstrations, workshops, and/or studio sessions

5. Supervision and mentoring of undergraduate and postgraduate students engaged in coursework and research projects

6. Preparation of research proposals to obtain competitive external funding from governmental and non-governmental sources, including larger group proposals

7. Active engagement in senior professional activities, both internally and externally, including program committees, engagement with industry, and international partnerships

8. Contributing to building the IT Faculty's reputation and recognition for research excellence

9. Participating in group and/or faculty meetings, including leading committees

KEY SELECTION CRITERIA

Qualifications/Education

1. The selected candidate will have:

   - PhD in computer science, information sciences, cognitive or linguistic sciences, brain sciences, or related field
   - several years of post-PhD teaching and research experience, and/or professional experience in the corporate world or outside of academics that demonstrates unique technical achievements or creative accomplishments

Knowledge and skills

2. Demonstrated ability, commitment, and passion for engaging in research and scholarly activities, including a strong record of research accomplishment that includes publishing in top conferences and journals

3. Strong methodological skills such as empirical/statistical, machine learning/deep learning, HCI design and analysis methods

4. Experience collecting and analyzing data in one or more key modality (e.g. speech, handwriting, images, gaze, activity patterns, etc.), bio-sensors, or combination

5. Strong technical skills relevant to the candidate's specific area of expertise (of those listed above), such as signal analysis (e.g., speech, brain waves), linguistic analysis, predictive data analytics, language and conversational dialogue processing, adaptive and personalized interface development, or multimodal fusion-based architectures and system development

6. Strong motivational, mentorship, and teaching abilities when working with students, and successful teaching experience in a university setting

7. High level of interpersonal and communication skills, and an ability to work independently as well as engage in teamwork

8. Successful at procuring grants and contracts, preferably including industry partnerships and diverse sources

9. Successful at working with diverse groups of people, including corporate and federal sponsors, international partners, faculty from other disciplines, fieldwork partners (e.g. medical personnel, teachers), and students and university staff at all levels

OTHER JOB RELATED INFORMATION

- Travel required (e.g., to conferences, professional meetings, other universities or partner sites)
- There may be peak periods of work during which taking leave could be discouraged or restricted

LEGAL COMPLIANCE

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness Occupational Health and Safety, supporting a safe workplace Conflict of Interest (including Conflict of Interest in Research) Paid Outside Work Privacy Research Conduct and Staff/Student Relationships.