SENIOR LECTURER – HUMAN COMPUTER INTERACTION

DEPARTMENT/UNIT	Human-Computer Interaction and Creativity – Human-Centred A.I.
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 organising 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 supervise undergraduate students, graduate students, and 1-3 postdoctoral fellows

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

Budgetary Responsibilities: Yes, in line with Key Responsibilities

KEY RESPONSIBILITIES

Specific duties required of a Level C academic may include:

1. The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, clinical sessions and/or studio sessions

2. Initiation and development of subject material

3. Course coordination

4. The preparation and delivery of lectures and seminars

5. Supervision of major honours or postgraduate research projects

6. Supervision of the program of study of honours students and of postgraduate students engaged in course work

7. The conduct of research

8. Significant role in research projects including, where appropriate, leadership of a research team

9. Involvement in professional activity

10. Consultation with students

11. Broad administrative functions

12. Marking and assessment

13. Attendance at departmental, school and/or faculty meetings and a major role in planning or committee work

14. Manages grant funding, may assist with HCI Centre budgeting

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee 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 analysing 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 personalised 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 to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted
- A current satisfactory Working With Children Check is required

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.