



The Institute of High Performance Computing (IHPC) was established in April 1998 to provide leadership in high performance computing as a strategic resource for scientific inquiry and industry development. Our mission is to advance science and technology, and develop leading edge applications through high performance computing and computational science.

We are looking for highly motivated individuals who are able to work independently and yet are good team players, possess excellent analytical, technical and problem-solving skills, good technical writing and presentation skills. If you share our interests in solving challenging scientific problems using computational science, mathematical methods and/or engineering techniques, we welcome you to apply for the following positions.

COMPUTING SCIENCE DEPARTMENT

Research Scientists/Postdocs/Senior Scientists

We seek researchers with talents and inclination to pursue first class research and are keen to work on multi-disciplinary complex systems. Specifically, successful candidates will be responsible for computational modeling and simulation tools to facilitate the understanding of ageing process. He/she is expected to explore the use of systems and control theory to identify the critical elements for age related dynamics driven extensively by experimental and empirical data. Of important concern is on developing interactive platform that will enable the analysis of "what-if scenarios" of the human ageing process. Successful candidates will be given opportunities to work closely with distinguished collaborators at both local and international research institutions and universities. Also, they will be interacting closely with various organisations to determine state-of-the-art models, and as a team, develop solutions to meet possible industry applications.

Relevant areas of research include but are not limited to:

- Statistical and mathematical modelling
- Control and network theory
- Agent-based modelling
- Complex and Adaptive Systems theory
- Data acquisition and management
- Data analysis, optimisation and visualisation

Requirements

- A PhD degree in Complex Systems/ Physics / Control Theory/ Computer Science /Computer Engineering / Mathematics or equivalent
- Substantial knowledge & programming experience in any of the programming languages C#, C++, Java (or evidence of ability to learn new programming languages)
- Demonstrate strong mathematical foundation and is able to work independently and as part of a multidisciplinary team
- Good publication record/patents would be an advantage
- Knowledge in database management would be an advantage
- Knowledge and experience in computational biology, bio-informatics, systems biology would be an advantage
- Knowledge and experience in handling multi-variable and large scale datasets would be an advantage
- Knowledge and experience of relevant open-source tools for model integration is valued

Contact

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