ECU COLLEGE OF ENGINEERING AND TECHNOLOGY

# Seminar

Department of Computer Science

## *High Performance Computing: A Critical Enabler for Learning and Business Innovation*

**Abstract.** Since the first modern electronic computer was created in the late 1940s, computing technology has penetrated into every aspect of our lives, and computing has become a new strategic method for human learning, discovery and innovation. Today, computational techniques have been widely adopted in industrial R&D processes such as automotive vehicle design, consumer product packaging, and petroleum reservoir exploration. These techniques have also revolutionized medicine by changing our approaches for new drug discovery and cancer patient treatment. In this seminar, we will use industrial and biomedical examples to showcase the power of High Performance Computing. We will also discuss new areas of applications enabled by the latest machine learning techniques

**Biography**. Dr. David Chen is a Senior IT Solution Architect for High Performance Computing and Analytics at IBM. He has worked extensively in application algorithm development, numerical simulation, code optimization, and performance evaluation studies. He is a frequent speaker at research and technology conferences, and has taught HPC technology workshops at multiple worldwide customer sites. His work in petroleum reservoir simulation and automotive engineering analysis resulted in several highly-optimized application software packages extensively used in these industries. He has also worked with university faculties, researchers and students to develop and optimize advanced computational algorithms and applications in Nanoscience, Astrophysics and Bioinformatics.

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Friday January 26 2018
Time: 2:00 – 2:50pm
Room: TBA

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