

Computing and Audio Research Laboratory School of Electrical & Information Engineering

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Recommendation for Kelvin Yuan-Shuo Hsu

Mr Kelvin Hsu was an excellent student in Electronic Circuit Design, a senior capstone undergraduate course in Electrical and Electronic Engineering. He showed a very keen interest and aptitude in this challenging subject, providing innovative answers to research and design problems.

Throughout this course, it is clear that he is able to complete design and analytical work in great detail while keeping the main conceptual theme in mind. As a result, I have selected his assignment as model solutions for the class, due to the detailed analysis, in-depth research and clear explanation he has presented.

I also enjoyed supervising Kelvin for his summer research project at the Institute of Biomedical Engineering and Technology from November 2012 to March 2013. Many people have applied for this project and Kelvin was awarded the opportunity, as well as the BMET scholarship, due to his excellent undergraduate performance and interests.

Kelvin's research project was focused on the area of Magneto-Acoustic Tomography with Magnetic Induction (MAT-MI) Imaging System, as originally proposed by Dr Xu Li's original PhD thesis at the University of Minnesota. It is a new, innovative and pioneering technology in the field of medical imaging and technology. Kelvin's contribution includes the simulation, verification and validation of the MAT-MI technology by mathematically modelling and computationally simulating the proposed physical phenomena on which the technology is based on. Through his computer simulations, Kelvin was able to verify the underlying physics behind a key part of the MAT-MI technology.

He took this project well in his stride, requiring little supervision and assistance. He was able to solve problems on his own and by liaising with industry supervisors. In my experience this is fairly rare with engineering students who have not been exposed to research.

On top of his academic and research project achievements, Kelvin's written and oral communication skills are excellent – an extremely valuable skill for the type of teamwork required in both industry and research. I strongly recommend him for a future project, internship or employment.

Kind Regards,

A.MG

Dr Alistair McEwan