

IEEE Summer School, 2013

Computational Intelligence and Information Technologies

Griffith University, Gold Coast Campus
February 19-21, 2014

Organiser: Jun Jo, j.jo@griffith.edu.au

This report summarises the activities for the IEEE CIS Summer School, which was successfully held at Griffith University, Australia in February 2014.

Venue:

Room G23_2.07A, Griffith University, Gold Coast Campus, Australia
(map: http://www.griffith.edu.au/_data/assets/pdf_file/0003/266871/gold-coast-general-site-map-2013.pdf)

Target audiences.

Students, academics, researchers and professionals in the ICT and Engineering fields.

Course contents.

- Theory, implementation, and performance evaluation of artificial neural networks.
- Applications of Computational Intelligence in integrated technologies, such as health, robotics, network security and engineering.
- Some hands-on sessions to reinforce the concepts and applications.

Speakers:

- Prof. Jong Hwan Kim, IEEE Fellow, KAIST (Korean Advanced Institute of Science and Technology)
- Prof. Michael Blumenstein, School of ICT, Griffith University
- Assoc. Prof. Alan Liew, School of ICT, Griffith University
- Dr. Paulo Borges, CSIRO
- Dr. Farid Kendoul, CSIRO
- Dr. Jun Jo, School of ICT, Griffith University
- Dr. Clarence Tan, Ambassador, Singularity University, NASA Ames Research Center, USA.
- Mr. Bruce Satchwell, CEO, Alive Technologies

The number of participants

40 registered participants. Most of them were postgraduate students, academics and people from local industries.

Responses from the participants

Overall, there were very good responses from the participants. They were particularly in favour that:

- The speakers and audiences had enough face-to-face discussions during the lectures and coffee/tea breaks.
- Experts from the field of Computational Intelligence areas.
- Various speakers invited from academics (including Professor Jong-Hwan Kim from KAIST, Korea), an ambassador from Singularity University, two from a research institute (CSIRO) and industries.
- An audience was an online media writer. She published an article about the event: <http://www.answersfrom.com/gaining-knowledge-of-advanced-technology-for-humanity/>
- No negative response at all.

Summer School Program

Wednesday, February 19, 2014

9:00-10:00 **Registration**

10:00-10:30 **Welcome and Introduction to Summer School** (by **Jun Jo, Griffith University**)

10:30-11:00 Break

Session 1

11:00-12:00 Topic 1: **The Next Technological Wave: Intelligence Technology (“IT”) for Intelligence Super-Agent** (by **Jong-Hwan Kim, KAIST**)

12:00-14:00 Lunch

Session 2

14:00-15:00 Topic 2: **Exponential AI technology Impact on Society**
(by **Clarence Tan, Singularity University**)

15:00-15:30 Break

15:30-16:30 Topic 3: **Challenges in population screening and monitoring for cardiac abnormalities using computational intelligence** (by **Bruce Satchwell, Alive Technology**)

Thursday, February 20, 2014

Session 3

10:00-11:00 Topic 4: **Guidance, Navigation and Control of Unmanned Aircraft Systems**
(by **Farid Kendoul, CSIRO**)

11:00-11:30 Break

11:30-12:30 Topic 5: **Computer Vision in Adverse Light Conditions: Challenges and Alternatives**
(by **Paulo Borges, CSIRO**)

12:30-14:00 Lunch

Session 4

14:00-15:00 Topic 6: **Computational Intelligence in Medical Imaging Applications** (by **Alan Liew, Griffith University**)

15:00-15:30 Break

15:30-16:30 Topic 7: **Solving the world's problems through Computational Intelligence: Challenges at the frontiers of Pattern Recognition research** (by **Michael Blumenstein, Griffith University**)

Friday, February 21, 2014

Session 5

10:00-12:00 Topic 8: **Game Programming for Android** (by **Michael Lennon, Tommi.Sullivan and Yukito Tsunoda, Griffith University**)

12:00 Closing

Photos



Prof Jong-Hwan Kim, KAIST, Korea



Prof Clarence Tan, Singularity University



Mr Bruce Satchwell, Alive Technology



Dr. Farid Kendoul, CSIRO



Dr. Paulo Borges, CSIRO



Assoc. Prof. Alan Liew, School of ICT, Griffith University



Prof. Michael Blumenstein, School of ICT, Griffith University