Dr. Graeme Faulkner

For several years since retiring, Graeme has had a lot of fun working on a voluntary basis with a group led by Ying Chen. This group has, as one of its aims, the spread of STEM knowledge amongst School Students using robotics programs that introduces building and programming skills, plus the unfortunately rarely taught life skill of being able to respond constructively to failure. He comments he feels privileged to be associated with this group.

Graeme's voluntary work led to him being nominated for Senior Australian of the Year, and gaining an award as the Most Inspiring Teacher in Tasmania in the Pride of Australia Awards, both in 2014.

Graeme's background before retiring was:

- The last 1/3 of his life lecturing at various Universities in Computer Science, Information Systems, Accounting and Engineering subjects. "Firsts" at the University of Tasmania included the first recorded lecture course (Computer Science using VHS tapes available in the Library), the first computer-human project (psychology response-time experiments using Prof. Kenneth Bowles' UCSD Pascal on an Apple][ ) and the first use of AI techniques (e.g. producing the same answer in two one-minute runs on a mathematical problem that took some 65 hours to completely enumerate, both run on the Elliott 503). Faced with the unusual challenge of a University maths-phobic class, Graeme implemented a turtle-graphics interface that permitted him to successfully teach the principles of Computer Science using only shapes in the term-long class.
- The middle 1/3 of life before that was as a full-time single parent caring for his children. During this time his Adult Education classes included use in the early 1980s of the Tasman Turtle, the world's first commercially available education robot, and another class that included teaching 5

different operating systems simultaneously in the one class (Vic 20, Commodore 64, Apple][and Apple 2 clones, a connection to a DEC mainframe and an all-Australian laptop produced by a Sydney firm).

- In the first 1/3 of his working life Graeme was an Engineer working for an Electricity Authority that produced all the electricity for Tasmania with negligible carbon dioxide output. He supervised the Commission's Engineering Computer service, including implementing in the late 1970s an Internet-precursor link between computers in the construction village Tullah on Tasmania's West Coast, and the Commission's Engineering Computer Service in Southern Tasmania, using the Commission's High Voltage transmission cables since there was no other suitable link then available.

- Graeme's first computer work was in 1964 using an Elliott 503 programmed in Algol 60 that was defined using recursive Backus-Naur notation. Instruction was by John Boothroyd, who had worked with Alan Turing during the second world war. Since then, in various projects Graeme has used over 20 different operating systems, as well as almost as many different computer languages.

Graeme spent two years working in S.E. Asia as a volunteer with the Australian Volunteers Abroad program, and over two decades with a voluntary Counselling service in Tasmania.

Graeme's qualifications are B.E., B.A., Ph.D., M.I.E.Aust., M.I.E.E.E., CPEng(Ret).