

The 2015 International Conference on Field Programmable Technology, held in Queenstown, 7-9 December, 2015



The conference was held at Rydges Lakeland Resort, on the shores of Lake Wakatipu in Queenstown. There were 96 delegates, attracted from around the world. Over 90% of the attendees were from outside of New Zealand, and for most, this was their first visit to New Zealand and Queenstown. The conference ran as a single track, with 6 oral sessions and 2 poster sessions.

We had 3 exceptional keynote addresses. Dr Andrew Ensor spoke on some of the technological challenges of the Square Kilometre Array project, and how some of these are being addressed through FPGA technology. Prof Andre DeHon outlined the energy advantages of FPGAs over other forms of computational acceleration, and traced these to their underlying architectural causes. From this he suggested further architectural refinements to maximise the energy advantages. Prof Vaughn Betz explored some of the connectivity and bandwidth issues facing FPGAs as they increase in size and become more powerful. He proposed addressing these problems through embedding network-on-chip infrastructure within FPGAs.

In addition to the usual technical activities, there was also a PhD forum where students could present work in progress, and a demonstration session, where some of the practical aspects or applications of programmable technology were demonstrated. In keeping with previous FPT conferences, the 2015 conference also had a design competition, where 12 teams designed an FPGA based artificial intelligence for playing the strategy game Trax. The designs were pitted against one another in a round-robin type tournament. Following the conference, two industry training workshops were held by Xilinx and Altera, the two main manufacturers of FPGAs.



There were plentiful opportunities for networking, catching up with colleagues, and meeting new ones. One of the highlights was the conference banquet, held at the Skyline restaurant, with a gondola ride up the mountain. The views were excellent, the food was superb, and the kiwi-haka performance had the international visitors enthralled.

More than one delegate commented after the conference that this was the best conference that they had attended, both in terms of venue (Queenstown and the surrounding hills were spectacular) and in terms of high quality technical content. (And they had been going to conferences for over 20 years!)

It was my pleasure to be part of the team working on the organisation of this conference. My thanks go to the rest of the organising committee, in particular the TPC chairs, for their hard work in helping make FPT 2015 a success. On the ground at the conference ensuring that everything ran smoothly were Mike Lobb (AV specialist), student helpers (Anoop, Hitesh, and Jason), my wife Robyn who looked after the registration desk, and the staff from Rydges who ensured that we had all that we needed in the right place at the right time. I am grateful for the financial support from sponsors: Xilinx, Altera, and Digilent, and technical co-sponsorship from IEEE NZ (North, Central and South sections).



Donald Bailey
FPT 2015 General Chair