

Assoc Professor. Michael Wybrow
Department of Human Centred Computing
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Biography

A/Prof. Michael Wybrow received his PhD in October 2008. His PhD thesis "Using semi-automatic layout to improve the usability of diagramming software" was awarded the CORE Association's award for the best Australasian Computer Science thesis of 2008.

Following his PhD, A/Prof. Wybrow worked as a research fellow from 2009–2010 at Monash University. In 2009, A/Prof. Wybrow also received the Monash Vice-Chancellor's commendation for doctoral thesis excellence. In 2010, A/Prof. Wybrow spent 6 months sponsored by a German company to research orthogonal connector routing techniques and extend his libavoid connector routing software library. From 2011 till mid 2014, A/Prof. Wybrow held an ARC Discovery Project that gave him an Australian Postdoctoral Fellow to work on "Flexible User-Guided Network Layout for Biomedical Applications" (\$261,200). In 2013, A/Prof. Wybrow received the 2013 Faculty of IT Dean's Award for Excellence in Research by Early Career Researchers. During this time, between 2012 and 2015 A/Prof. Wybrow worked for nearly 3 years part-time following the birth of his daughter.

From 2009 to mid 2014, A/Prof. Wybrow was research-only, although his software contributions have resulted in considerable industry interest and he has at various times been involved with software licensing and commercial research collaborations that have totalled over \$100,000 but have also at times resulted in reduced research outputs as he supported these industry contracts. In mid 2014, A/Prof. Wybrow accepted a Lecturing (teaching and research) position with the Faculty of Information Technology at Monash.

After accepting a lecturing position in mid 2014, A/Prof. Wybrow was tasked with creating a new first-year course, ENG1003, an ambitious IT literacy, app programming and introduction to Software Engineering unit that would be taught to the Engineering first-year in Clayton and Malaysia from Semester 1 2015 onwards. ENG1003 was an important Faculty priority, with 1,300 local students per year, and additionally delivered in Malaysia and Monash College. A/Prof. Wybrow's responsibilities as designer, lecturer and Chief Examiner of ENG1003 required education to be his primary focus for the first two years after his appointment. Despite this heavy teaching commitment, A/Prof. Wybrow maintained the high-quality research, receiving the best paper award at IEEE InfoVis 2015, the most prestigious conference in the Information Visualisation field.

For the last couple of years, A/Prof. Wybrow has led the Optimisation half of an industry project on Optimal Chemical Process Plant Layout with Woodside Energy., Australia's largest operator of oil and gas production. This project is worth more than half a million dollars and has paid for 3 research fellows and 1 programmer to work on the problem for several years. This has been a very successful collaboration, with a strong chance of commercialisation.

Since 2019, A/Prof. Wybrow has been the Faculty of Information Technology's Director of Work Integrated Learning. In this role, he is responsible for the prestigious Industry-Based Learning (placement) program and the various Industry Experience units offered by the faculty.

A/Prof. Wybrow is known for his research on high-quality connector routing for diagrams, for interactive constraint-based network layout and for explainability of constraint-based optimisation systems. His research is very practical, and software arising from the research is widely used in academia and industry. A/Prof. Wybrow has had several industry-funded projects and has attracted over \$2,250,000 in combined competitive grants and industry funding. Further recognition of his standing in the research community are frequent invitations to serve as a reviewer for top international conferences and journals, and six invitations to attend prestigious workshops at Schloss Dagstuhl. For the last four years, he has served on the program committee for IEEE VIS, the premier visualisation conference in the field.

Qualifications

Computer Science, Doctor of Philosophy, Monash University
Award Date: 16 Oct 2008

Computer Science, Bachelor of Computer Science (Honours), University of Melbourne
Award Date: 16 Apr 2003