

Things go better with mentors

"You can judge a supervisor by the quality of their PhD students," Professor Vikram Krishnamurthy, Department of Electrical and Computer Engineering at The University of British Columbia says.

At just thirty-three years of age, Jonathan Manton, Queen Elizabeth II Fellow at the Research School of Information Sciences & Engineering (RSISE), is one of the youngest full professors at The Australian National University and a former student of Krishnamurthy while at Melbourne University where he gained his PhD.

While Krishnamurthy is keen to give special recognition to students who have, in his words, gone on to outshine him in their chosen research areas, full professorship at thirty-one is an outstanding achievement.

Jonathan is modest about reaching this goal within seven years of completing his PhD and credits part of his success to having excellent mentors like Krishnamurthy and others at the ANU and beyond. The mentoring role, which fosters sharing knowledge and experience from student through to early career and veteran researcher, is something he wants to pass on to his own PhD students.

"Students are the lifeblood of a university," says Jonathan. "My own experience with mentors is something I'd like to cultivate with my students. I feel that it is an important part of the relationship between student and supervisor."

Professor Manton's research interests are broadly in non-linear signal processing and computation.

"As a mathematician and an engineer I am gripped by the idea of using technology, and particularly maths, to solve complex problems which then have applications in society," he said.

Seemingly lightweight problems like audio restoration techniques to reinstate sound archived on old vinyl or shellac records that has an impact on a small section of the community, through to solving costly signal processing problems in things like mobile phones and wireless Internet that have a mass impact on many millions of people, share the same kind of research commitment from Jonathan.

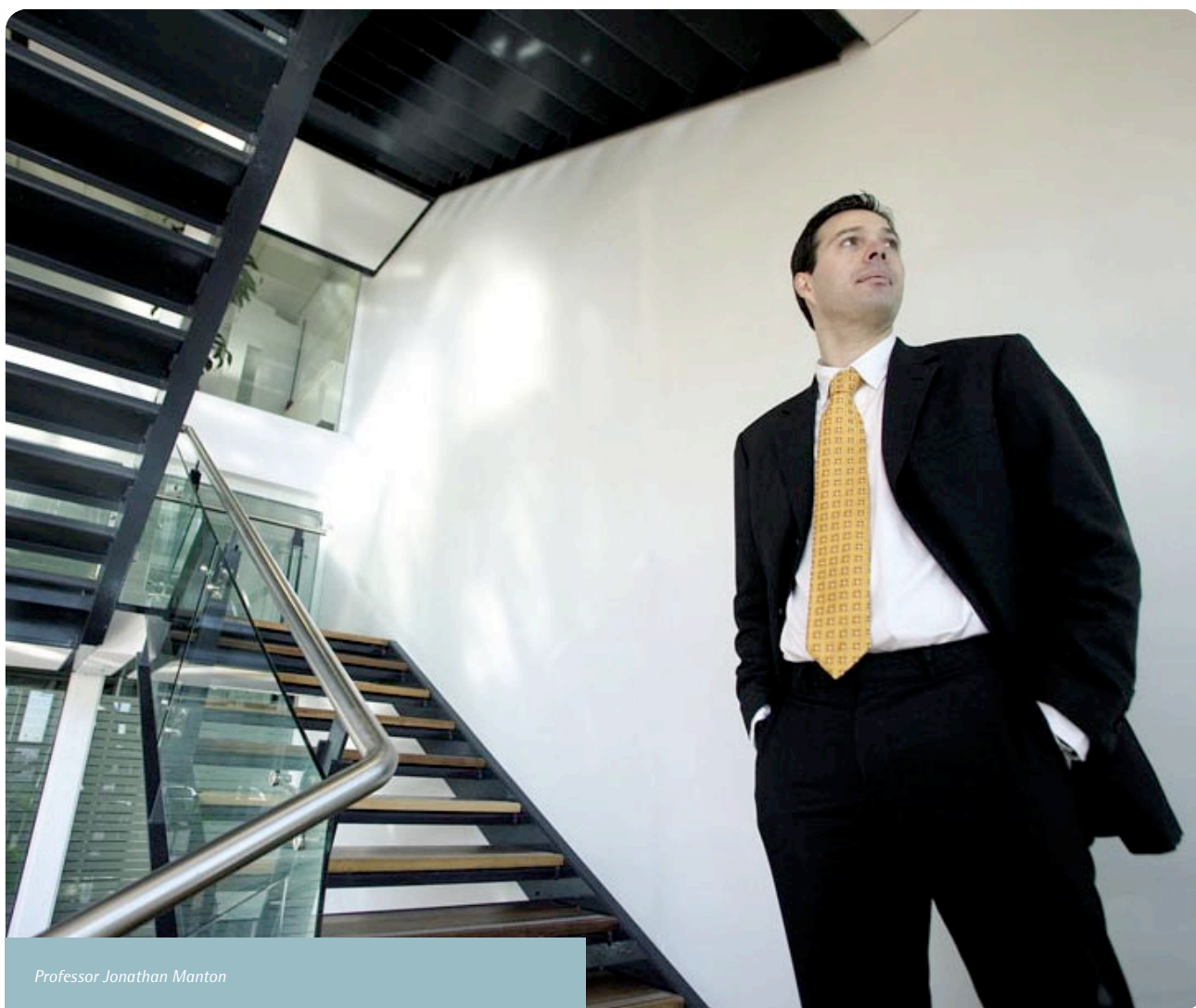
So does the emerging field of systems biology which is a 'hot' new academic discipline needing mathematicians, engineers, biologists and computer scientists.

Jonathan was recently picked by the Australian Research Council (ARC) to head up the Mathematics, Information and Communication Sciences division and is currently taking leave from the ANU.

"But I am still doing my research, and supervising my students through their PhDs," he said.

Some would say he was a glutton for punishment.

"Not really," says Jonathan. "If you go to the newspapers, you see the government worried about how to create more innovation in Australia. You see articles about the lack of students in science and mathematics. The only way to try and change this is to be active – to make students interested and passionate about learning."



Professor Jonathan Manton