# DISTINGUISHED PROFESSOR **PETER CORKE**



# **AUSTRALIAN UNIVERSITY TEACHER OF THE YEAR 2017 QUEENSLAND UNIVERSITY OF TECHNOLOGY**

#### DISCIPLINE

Artificial Intelligence and Image Processing; Engineering

**RESEARCH AREAS** 

**Robotics Computer Vision** Electrical and Electronic Mapping and Navigation **Spatial Cognition** 

staff.gut.edu.au/staff/peter.corke

### BACKGROUND

Distinguished Professor Peter Corke received his Bachelor of Engineering and Master of Engineering Science degrees, both in Electrical Engineering, and a PhD in Mechanical and Manufacturing Engineering, all from the University of Melbourne. Prior to QUT he was a senior principal research scientist at CSIRO where he founded the Autonomous Systems laboratory, a 50-person team undertaking research in mining, ground, aerial and underwater robotics, as well as sensor networks. Subsequently he led a major cross-organizational 'capability platform' in wireless sensor networks. Distinguished Professor Peter Corke has spent much of the last 15 years developing field robotic systems and sensor networks. Field robots are robots applied to applications such as mining, agriculture, construction, environmental and infrastructure monitoring. This includes robots that fly (also known as unmanned aerial vehicles, UAVs) and operate underwater (also known as autonomous underwater vehicles or AUVs). Professor Corke wrote the textbook Robotics, Vision & Control, authored the MATLAB toolboxes for Robotics and Machine Vision, and created the online educational resource: QUT Robot Academy

## **IMPACT ON LEARNING & TEACHING**

The award has given Professor Corke a sense of legitimacy. It has given him permission to think of himself as a teacher, as well as a researcher and allowed him to focus on further developing his technological approach to teaching at scale. Professor Corke says he now has the time to develop his teaching through an even wider range of modalities. He is passionate about using technology to reach people who otherwise might not have access to robotics education, in particular those internationally or in remote locations. The development of his teaching had previously been done in-between research projects so to have it recognised has allowed him to focus on it more fully and develop it in new and exciting ways.

### IMPACT ON CAREER

The award has increased Professor Corke's ability to focus on teaching and learning. It has allowed him to consider and start planning for a move towards a career with greater focus on teaching and learning and he is keen to continue sharing his deep domain knowledge with future generations from around the world. As a research active academic, the award has brought recognition for teaching that is informed by his research practice. He has received invitations to present on his teaching at universities across the state, and more recently has acted as an assessor for the Australian Awards for University Teaching.

### CURRENT ROLE

Professor of Robotic Vision Science and Engineering Faculty, Electrical Engineering, Computer Science, Robotics and Autonomous Systems

#### WHAT THE AWARD HAS MEANT

Stoked | Unexpected | Leverage

### **MAJOR ACHIEVEMENTS**

- 2013 Director of ARC Centre of Excellence for Robotic Vision;
- 2009- Editor-in-chief of the IEEE Robotics
- 2013 & Automation magazine;

Founding and associate editor of the Journal of Field Robotics;

Founding multi-media editor and editorial board member of the International Journal of Robotics Research.

### **NETWORKS**

Fellow of the Australian Academy of Technology and Engineering (FTSE) | Fellow of the IEEE (FIEEE) | Senior Fellow of the Higher Education Academy, UK (SFHEA) | Member of IEEE Robotics and Automation Society. | Officer of the International Federation of Robotics Research (IFRR)