



GRIFFITH UNIVERSITY

Media Release

Media Information Office of External Relations
Phone: (07) 3875 7809 • Fax: (07) 3875 7907

Robots with road sense at Griffith

Tales of thinking robots are no longer confined to the science fiction genre, according to a Griffith University academic.

“The era where robots can sense, think, then act is very much upon us,” Dr Ljubo Vlacic from the School of Microelectronic Engineering said.

Dr Vlacic’s work in developing cooperative, mobile robots has been heralded a ‘breakthrough’ in the scientific community - destined to alter traffic conditions in the decade to come.

“We’ve developed robots that can approach a traffic intersection, exchange information about their intentions and apply conventional logic in crossing. They know whether the intersection is safe to cross or not,” Dr Vlacic said.

“In terms of road safety, the benefits of this technology are obvious.”

The robots are also capable of trailing each other or another vehicle through traffic, maintaining a safe distance between the two.

“Many drivers tend to follow other cars too closely which doesn’t allow enough time to stop their car in an immediate braking situation. If installed in the passenger’s car, these distance-control mechanisms may alert the driver through an audible or visible indicator, or by actually automatically reducing the car’s speed,” Dr Vlacic said.

While Dr Vlacic envisages cars travelling without a human at the helm within a decade, his mobile robots will never act as human substitutes.

“That would not make sense,” he said.

“It is my goal to develop robots to assist humans, not replace them.”

More...2/

...2...Robots with road sense at Griffith

A grant from the Department of Employment, Education, Training and Youth Affairs has ensured both Japan and Australia work together to exchange ideas on their parallel robotic research.

Professor Makato Kajitani from Japan's University of Electrical Communications recently visited Griffith's Intelligent Control Systems Laboratory to exchange notes with Dr Vlacic.

Dr Vlacic said the field of intelligent robotics was still in its infancy with little theory available on how to build autonomous agents.

The ultimate goal of Dr Vlacic and his team of postgraduate students including Mark Hitchings, Anthony Engwirda and Zivan O'Sullivan is to build intelligent systems capable of performing interactive behaviours in real-world situations.

He said the transportation industry stood to benefit most from these advances.

ENDS 18 November 1997

For more information please phone Dr Ljubo Vlacic on (07) 3875 5024.

Fran Rossberg, External Relations, (07) 3875 7809 or Mobile 015 642 108.