Some student comments from 2017/18

• “Overall very good. An interesting topic, well presented.”
• “The module was good, Computer Vision is an interesting area. The amount of content was appropriate in giving an insight into Computer Vision without overloading us with the more complex theory.”
• “Very enjoyable. Labs were extremely tough, but gave good insights into the field of vision, in so far as an idea might seem easy, but getting it to work can be quite hard.”
• “This module was definitely one of the most interesting (if not the most interesting) module I had this semester, I'm glad I chose it. The lectures were interesting, the tutorials helped practicing with the algorithms presented in lectures ... Overall really good module.”
• “It’s a really interesting module, really different to the other modules, I enjoyed doing the assignments”
• “The lecturer has overdosed with enthusiasm and I can only appreciate that. Hopefully he is wrong on ML/autonomous driving.”

Solving practical problems – now

Reproduced by permission of Omron Electronics LLC

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Practical problems: Finding landmines

Interfacing with the world

© Demining Technology Center (Reproduced with permission)

© WAYRAY (Reproduced with permission)
Augmenting reality: Vision in the Movies

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Dodging the snowflakes...

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Idea: Stream Light Between Snowflakes
Goal: High Light Throughput and Accuracy

© Takeo Kanade, CMU
The goal of Computer Vision?

Ultimately emulating this…

So, how are we doing?

Course Organisation

Problem based learning (to an extent)
Based on a single text as much as possible.

- A Practical Introduction to Computer Vision with OpenCV
  by Kenneth Dawson-Howe, Wiley (2014)

Slides provided in electronic form.

2-3 Course assignments to reinforce concepts.
- Hands-on experience of computer vision operations.
- Hands-on experience of coding computer vision operations.

Application of techniques worked on in group tutorials.

Prerequisites:
- You must be a competent/confident programmer in C++ or Java (or similar language).
- You must have reasonably good ability in maths: Previously half the class thought there was too much maths and half felt there should have been more!
For more information:

CS4053 – Computer Vision

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