Vision in an Increasingly Mobile World
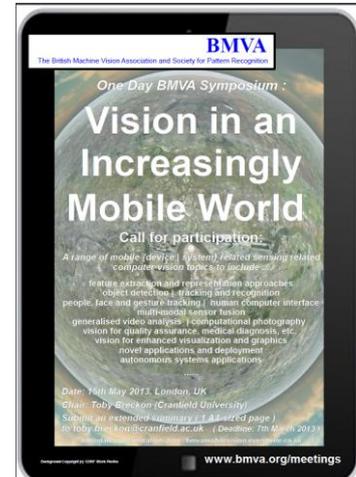
One Day BMVA Symposium at the British Computer Society May 15th 2013

Chair: Toby Breckon (Cranfield University)

My first technical meeting as a non-student/real world worker….

Kicking things off was Dina Damen (www.cs.bris.ac.uk/~damen/) presenting the work of Pished Bunnun. A demonstration of real-time detection of fairly featureless objects was fun which included a highlight for me: "hallucinations" is the new term for false positives! I wish I'd used that for my thesis… out with the false-positive rate, in with the hallucination rate. Matthew Brown (www.cs.bath.ac.uk/brown/) presented an in-depth history of AutoStitch for iPhone (coming soon to Android). It was interesting to see the approximations and tricks that had been implemented. Though, on the tube afterwards, I was kicking myself for not asking if it made any money. Jose Rivera-Rubio (www3.imperial.ac.uk/people/jose.rivera10) discussed his work on assisting the visually impaired understand their surroundings. In particular the generation of a database of images that can be used to test recognition algorithms. Renato Salas-Moreno (www.doc.ic.ac.uk/~rfs09/) presented his work on SLAM++ which moves Andrew Davison's work up to the level of objects . This work is/was also presented at CVPR 2013.

Following a rather splendid lunch (worth the £5 – in the past I've nipped out for a burger but this time I should have brought a doggy bag) we entered the afternoon sessions. First up was Ioannis Katramados (www.cosmonio.com) who discussed his experience of crowd-funding through Kickstarter (www.kickstarter.com) – timing seems to be very important. This was followed by Will Maddern from the Oxford Mobile Robotics Group who presented an overview of the RobotCar that has been in the news recently (http://mrg.robots.ox.ac.uk/robotcar/). Having seen a similar presentation about the Google car at CVPR last year it looks to me like Google are not going to have everything their own way.

A short break for tea and biscuits then Calum Blair (http://home.eps.hw.ac.uk/~cgb7/) presented an analysis of cpu vs fpga vs gpu in detection of people using HOG – Which is fastest? Which uses most power? Can you split the task up between processors to optimise the performance? Calum's presentation is available on his website. Finally Rui Hu (http://personal.ee.surrey.ac.uk/Personal/R.Hu/) presented her work on using a freehand sketch to retrieve images from a database – if I draw a house I should get back images of houses. Interestingly this was extended into the realm of video – can a sketch retrieve relevant videos?

So, as I sat on the tube to Cockfosters, I would say it was a good day. I would always recommend these one-day technical meetings – the talks are always interesting; the location is superb; the food is pretty good, and you can take in the sights and sounds of London afterwards.

Greg Flitton