Scientists release unique app for video enhancement

"DollyCam is the best software for automagic video stabilization"

August 3, Linköping, Sweden. Scientists at Linköping University in Sweden recently launched DollyCam for iPhone and iPad. The app is based on patent pending technology that automatically stabilizes video captured with CMOS video cameras, such as found in new mobile phones, and tablet devices. The result is astonishing and lets amateurs create professional movies without expensive equipment.

Anyone who has tried to capture video with a mobile phone knows how easily the result becomes shaky and wobbly, with skewed objects and an overall amateurish feeling. The poor result is caused by the rolling-shutter technology used in low-end consumer cameras, and by the fact that you hold the camera in your hand. Professional filmmakers use global-shutter cameras, rails and dollys for smooth camera movements.

DollyCam is based on leading research in computer vision. The unique algorithm uses three-dimensional data from the gyroscope and accelerometer sensors on the iOS device to correct tilted objects and remove wobble. A video stabilizer then adds smoothness and makes the movie stable. DollyCam is also adaptive and adjusts its parameters dynamically to the movie processed. The scientists have conducted a blind user study among students on campus. The study demonstrated that participants preferred DollyCam output to that of its competitors.

"With this app you get a professional and smooth video from a cheap consumer camera", says Per-Erik Forssén, assistant professor at Linköping University who presented the underlying algorithm at the international IEEE Conference on Computer Vision and Pattern Recognition in San Francisco 2010.

The scientists recently founded the company FR Vision AB, with support from the Innovation Office at the University. DollyCam is their first product, but the company also intends to disseminate the technique as professional products for video editing packages like Adobe After Effects and Apple Final Cut, as well as application programming interfaces that allow integration in other products.

"Our vision is to integrate our technology in hardware from big players like Apple, Sony Ericsson, and Samsung, to let a bigger audience experience better movies", says Erik Ringaby, doctoral student at the Department of Electrical Engineering at Linköping University. "We also hope service providers like Google and Facebook will be interested in licensing our technology."

DollyCam on iTunes: http://itunes.apple.com/app/dollycam/id449577531
Youtube link: http://www.fr-vision.se/dollycam.html
Company webpage: http://www.fr-vision.se
For questions and further information email: mailto:press@fr-vision.se