

New golf-gaming product development

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A novel golf-gaming product is under development at Cambridge Ultrasonics (CU), hopefully soon with the help of crowd-funders. It is the first time that crowd-funding has been tried by CU but we like the idea of having so many golfers helping us not just to raise working capital but to guide us on what they want the product to do.

The crowd-funding campaign has just gone live on KickStarter on:

<https://www.kickstarter.com/projects/1785501056/golf-gaming-product-development>

If you would like to donate that would be wonderful - thank you. You can donate as little as GBP 10 or as much as you would like. We are offering 5 levels of donations and as a reward you get feedback on progress of the development project; the bigger the donation the more you get to be involved with the project with the biggest donations qualifying for a guided tour of the historic parts of Cambridge, UK, given by myself and with the top level donation you also get a candle-lit dinner in a Cambridge college as my guest.

CU is adding more information to a new web-site:

<http://www.golf-game-cambridge.com>

The technical idea is to use ultrasound to follow the golf ball once it's been struck by the golf club and to calculate the speed and direction of the ball. The information is given to golf-simulation software that predicts the full trajectory of the ball in virtual reality and shows the ball: flying through the air, bouncing on the ground, running along the grass or dropping into the hole by the flag.

We envisage the ultrasonic unit being small and portable and placed near the ball on the ground. Obviously the golfer does not need to be on a golf course and she/he could be indoors out of: the rain/snow/cold/darkness/ocean/space. The ball should be captured by a net just to make sure pets/children/partners/lamps/windows won't get damaged! The important thing is to play your normal golf-shot with your normal club: driver or iron or putter. You need to use the same stroke-skill that you would use on a golf-course and that marks this golf-game device as something different from family entertainment products already on the market that need much less skill. There are also expensive devices on the market that cost up to \$ 100,000 but CU's plan is to make an affordable but quality product that any regular golfer can afford.

I mentioned earlier that we value golfers guiding the specification of the prototype. We are embarking on this crowd-funding campaign due to a handful of golfers that have already come to us over the years asking if ultrasound can be used to advantage with various aspects of the game of golf and trying to get CU to help them. Similarly, we have also been

approached by people who want ultrasound to be used in cricket and basketball and other sports. The crowd-funding campaign is really as a result of golfers' enthusiasm for golf and their desire to enjoy golf more often: during the winter or to avoid exorbitant course fees. This message is indirectly due to these fanatical golfers!

CU has been working on the project for about the last 3 years on and off. We have completed many tests on feasibility and it all looks promising; of course, building and using the final working production model is the ultimate feasibility test and we are not there yet but the feasibility tests we have done have been positive and set us thinking on how to solve some particular problems associated with this application. We think we have solved them and those ideas have gone into patent applications.

Ideally, we would raise enough capital to see the development project all the way through to production and sales but we need to be realistic, the crowd-funding campaign has a minimum target that should enable us to make a preliminary prototype any extra will help to get things done faster. With a prototype we can approach business angels and venture capital businesses for the investment to see the project through to production. Just returning briefly to the donations, we hope that potential business angels or venture capital companies will donate at the highest levels so that we can make contact that way.