

Racing against Formula 1's greats

Racing from your living room against hotshots like Kimi Raikkonen and Fernando Alonso in a real Formula 1 race. The company iOpener Media, recently relocated to the TU's incubator Yes!Delft, wants to make this new form of interaction possible with its product 'Real-Time Games'. By housing an increasing number of such high-tech startups, Yes!Delft is steadily setting the stage to become the 'Silicon Valley' on the North Sea.

Samir Saberi

Located on the outskirts of the university campus, on the Rotterdamseweg, YES!Delft offers anyone who wants to start their own technology based company a vitalizing environment in which to learn how to build their company from the ground up.

The 'Young Entrepreneurs Society' in Delft (YES!DELFT), a joint initiative between TU Delft and Delft municipality, aims to boost innovative technological entrepreneurship within and outside the university.

At YES!DELFT, TU students, alumni and staff, as well as others who are dedicated to starting their own high tech companies, are coached on simply everything they need to know to ensure their business ventures succeed. Yes!Delft assists the would-be entrepreneur through the many initial stages of entrepreneurship, such as how to judge the value of a business idea and how to fulfill the requirements of obtaining patents and subsidies, as well as offering help with writing solid business plans, attracting investors, and actually running the company.

Launched in 2005, YES!Delft has since made significant progress. It now houses more than thirty innovative tech-startups, ranging from startups like SENZ Umbrellas, whose invention of an umbrella that can withstand storm winds recently made headlines on CNN and other international media outlets, to Ceerzs Solarboats B.V., the first company in the world that offers speedboats that run on solar energy.

One of the companies that recently relocated to Yes!Delft and plans to revolutionize the gaming world is iOpener Media. iOpener Media doesn't make trivial promises to the racing games fanatic: thanks to a smart combination of existing technology and the development of new artificial intelligence, the racing devotee will in the very near future be able to compete in 'real time' against professional Formula 1 drivers, like Kimi Raikkonen, Fernando Alonso and Lewis Hamilton.

iOpener Media is a spin-off of the European Satellite Association (ESA). iOpener Media is located in Aachen, (Germany) and Delft, in order to acquire the expertise found at the "world-class technological universities" in both locations. "To attract the right people to join our team has been one of the main reasons for us to move to Delft," says Andy Lúrling, iOpener's commercial director.

In the digital and online gaming world, gamers currently compete against their own computer, against each other, or against thousands of other gamers at the same time, via the so-called *massive multiplayer online* games, such as the World of Warcraft and Lineage 2. Whatever the case, the game is always played in a virtual reality.

Confidentiality

With 'Real-Time Games' iOpener provide gamers a whole new game dimension. The wall between the real and the virtual world is taken away. The game is played between opponents on both sides of the spectrum. The professional Formula 1 driver doesn't only have to compete with his opponents on the track; he also has to beat mister-unknown in the suburbs of Tokyo or far-flung Friesland.

"Real-Time Games offers the gamer the possibility to log into a game and compare himself or herself with real professionals," says Lúrling. The gamer can compete against the professionals in one-to-one configurations, but also compete directly against the professionals in a real racing event. Additional options are to play the race against other online gamers or against the professionals afterwards, because the product enables the storage of, for example, a real Formula 1 championship.

By providing gamers with this possibility, iOpener departs with 'Real-Time Games' from the prespecified nature of many (racing) games. By actually making gamers part of the race, it offers gamers the possibility to experience the spontaneity of a real race, as well as all the excitement and suspense that comes with it.

By residing in Delft iOpener hopes to attract topnotch technical professionals who will contribute to the further development of, among other things, the artificial intelligence algorithms that make the interaction between real and virtual information possible.

iOpener uses existing technology, such as GPS sensors and IMUs (Inertial Measurement Units), which are mounted in the racecar, for the generation of 'real' data. Real data includes the speed of the car and its position on the racetrack. A communication system transmits this data gathered from all the racecars to a central server, where it's stored, interpreted and transformed.

This data is subsequently by means of new artificial intelligence algorithms integrated in the game, so that a real racecar can actually interact with the player in the game. According to Lúrling these algorithms also allow for creative solutions, such as making it possible that a 'real car' can pass a car that is driven by a virtual gamer. Lúrling: "And it's exactly this level of interaction that is going to give gamers the feeling that they can influence the game, and as such be a part of the race."

According to Lúrling the preparations for the launch of the game are in an advanced stage. The first test results showed that the developed technology makes a game between real and virtual players indeed possible. "The next phase will focus on turning the technology into a marketable product and securing sufficient funds. Currently we are in the final stage of the negotiation process with a venture capitalist," Lúrling explains.

For the time being, iOpener is using this technology to focus on the growing games market. Lúrling: "The technology we developed can be used for more than ten different game genres. But besides for entertainment games, this technology can also be used for the simulation of training games."

iOpener says that the reactions from the market have thus far been "phenomenal". Lúrling: "Because of reasons of confidentiality, I can't mention names, but I can say that we're now talking with the major racing brands and (race) game publishers and game developers."

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