Interview with:
Geert Langereis

What's your history?

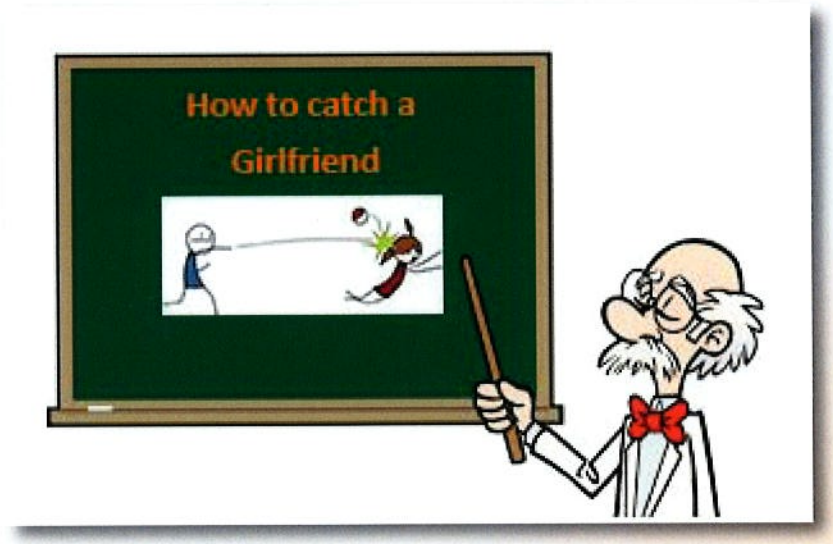
'I have studied Electronic technology at the TU Twente. After this I studied Ergonomics and obtained a Ph.D on sensors for self-learning washing machines.' The project was for Unilever, a company which did not make washing machines but the washing powder... The main task was to find out what kind of washing powder needed was ones a washing machine of this sort was invented and brought on the market.

After his educational experience Geert worked at Philips Research for 10 years. 'I worked on optical storage, a CD recordable which we now know as Blu-ray disks. The main task of this research was to get the speed of this CD on his highest level.' After this project he did some research on MEMS, mechanical electronic systems in smartphones. After he ended his research on MEMS, he worked on wearable sensors, these sensors were integrated in clothing so that we should be able to measure different things on human beings, such as heartbeat and breathing.

When he ended his career at Philips he became assistant professor with Industrial Design at the TU Eindhoven. He continued his research in wearable sensors and besides that the interaction between human and technology. After 5 years working at the TU Eindhoven he decided to become a leading engineer at Omron Den Bosch, he found out that this wasn't really about research but more about product development. 'After this I've been searching for what I really enjoy, new and innovative projects and learning young people. So the Fontys would be an excellent choice.'

Why did you want to become a teacher?

'I learned while I was an assistant teacher at TU that young people are fun to work with.' He tells me that he thinks that young people are more eager to learn and their making their own education by asking about stuff they want to learn. Besides that students are not limited by the mistakes that are once made. If a person wants to learn more about an Arduino he'll just go to a teacher to ask him if he can learn more about it. 'In the business world we're more pushed in one direction.'



Can you tell me more about your web sites and why they are made?

As some people may know Geert has two websites which are filled with electronic knowledge. 'I have two websites, the first one is www.geertlangereis.nl this is a site which at first was about my hobby projects. Eventually this site became more and more about answering questions that students asked, because students are always asking the same questions. So I made another site: www.fontyssensorwiki.nl.' This site has more information about different questions and besides that it serves as a kind of honor to the projects of students. 'What the purpose of the site eventually is: it serves as a lesson method for students, so that the teachers don't have to answer twice the same questions plus students can find it anywhere anytime. And second to let the outside world know what kind of research the school does and how it's connected to each other.'

Besides that this projects are becoming a 3th research line, besides the mechatronical lectureship and 3D-objexlab. It's called Distributed sensor systems. The purpose of the projects are to combine different sensors in different products together into one system. Also Jeedella Jeedella and Mark Hendriks are working on this project.

What more is there to know?

If being a teacher at electronic technology isn't enough, Geert is also involved in the minor EGT (Expertise center for healthcare and technology) and the minor Expertise center for Hightech systems and Materials. Besides that he tells me: 'Some projects that aren't really interesting for engineering yet are first done by Technical Physics, they find some new information on the subject which leads to a new EXPO or IPD project.' He claims that he always wants to try to find new inventions without technological help. 'We're too fast with putting new technical innovations into a problem. If we can try to fix things without technology it's way more interesting.'

But as if that wasn't enough, Geert also enjoys having hobby projects besides school. For instance he helps a friend who is searching for a method to help African woman with birth control. 'It gives African woman the choice if they want to be pregnant or not. We put mechanical valves in the oviducts of the woman. If the valves are open the woman can get pregnant but if they are closed she can't. The doctor can open or close the valves for them so that they can decide on their own what they want.'

I think it is only fair to say that we can learn a lot of the experiences Geert has. And for all the electro and mechatronic engineers, if you have any sort of problem with electro technology first try to find the answer on www.fontyssensorwiki.nl, instead of running to a teacher directly...