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Community Talk with **Gjalt Loots**

A multifaceted connector

At a time when personal computers began to establish their presence in family houses, Gjalt Loots grew up fascinated by the possibilities they offered for gaming and tweaking but also, and more importantly, with a yearning to find out how they worked. So electronics and digital devices led to a natural interest in studying computer science in which he gained a degree at the University of Groningen. His career began as a researcher in the field of Artificial Intelligence (AI) long before it had gained the mainstream attention that it has nowadays, and later he became a consultant and project manager at TNO. A clear progression from hobby to study to profession, with AI as a common thread.

Buckle up for the ride ahead

"It's a hot topic today. Very, very hot," Gjalt says. "I would say that if you're interested in technology, there is no news item that goes by without any mention of AI, open AI, chat bots, large language models and the like. Back in the days when I was studying, there was also AI with neural networks and those kinds of technologies that are still the key principle and drivers behind what we see today, although on a much smaller scale. We were actually teaching robot vacuum cleaners to find an automatic path through your house and developing licence plate recognition

algorithms to detect speeding road users. Now, if you look at the latest Al-steered chat bots my teenage kids are using this technology at school and giving teachers a very hard time in figuring out what was written by a human and what has been generated automatically with just a few prompts. It's an amazing time right now but there's an argument to put a halt to it all. Even a few of the major forces behind the current development are not able to explain what we are seeing and how it is behaving. And it's available for free to billions of people to unlock enormous potential on the one hand but also to use for malicious purposes on the other hand. While it's nice to have witnessed this evolution from back then to where we are now, I couldn't say what the future might hold. I think you should really buckle up in that sense."

Beneficial transition

Among Gjalt's main career highlights is receiving an ITEA Award of Excellence for the ITEA project MOS2S as well as enjoying so many fruitful collaborations with partners from the Netherlands and abroad in the field of innovation. "My personal involvement in many sectors, ranging from space,



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multimedia, telecommunication, Al, digital data ecosystems and the energy sector have allowed me to quickly gain not only a deep and broad experience with technological challenges and innovations, it has also provided me with a network of peers from across the world." R&D has been the central thread in Gjalt's work, beginning at KPN, the largest incumbent network operator of the Netherlands, whose research and development branch was taken over by TNO in 2003. "At that time, TNO had an IT ambition," Gjalt explains, "so I think it was a very mutually beneficial transition, especially for me since I get to work with so many different talents and can mix and match the expertise required for a project. From anywhere within our organisation I can assemble a team to do the job."

Investing with a social flavour

This capability is something that paid off handsomely in 2016 when an ITEA project came calling. This took the form of the MOS2S project aimed at developing and testing audiovisual Smart City technologies and embedding the solutions in a dedicated Smart City Playground.

Gjalt led that consortium and that was the first time he became personally acquainted with ITEA. "Although I have a technical background as such, it was steering and assembling a consortium that really appealed to me. It was challenging to be successful on that front, and in submitting a proposal that was selected for funding as well as deliver on the proposals. It's about looking at how we can make crossfertilisation work by teaming up. That's the essence of an ITEA project. It's not just like, hey, it's a great idea and here's a bag of money – good luck finding out if it works or not. No, ITEA approaches that process as an investor where it's not about making a quick buck. It has a social flavour where the industry and technology organisations work in tandem to produce real marketable products. We had the Netherlands, Belgium, Türkiye and South Korea involved – a very nice and diverse set of countries all with their own use cases and pilots. And having Samsung as a partner, for example, created a global scope, and that's a rare opportunity. As was the timing of the South Korean pilot case we set up at the Winter Olympics. The whole team got to travel to South Korea and we

even took in a couple of events. We worked hard and played hard. It made for friendship and companionship that we will never forget for the rest of our lives."

Accessible, cooperative, proactive

Gjalt also appreciates the ITEA Office team. "I have met them many times over the years. What always stands out is how effective the team's approach is: very accessible, cooperative, proactive with respect to not only supporting a project's lifecycle but also in dissemination and establishing cross-fertilisation. These qualities are a constant factor and deserve recognition and appraisal. If I do have a point for improvement, it's synchronicity. The ITEA organisation relies on national Public Authorities for assessing and funding projects and each country has the freedom to implement its own process to award funding to projects. In practice, this means that the time at which countries approve or decline funding requests may differ significantly, which makes starting a project challenging. It would help if a stronger alignment would be in place. But, all in all, my advice to ITEA is: keep rocking!"