



Security Careers Case Study

ELECTRONIC SECURITY



Winner of the 2023 Australian Security Industry Award for Excellence, Individual Achievement – Technical Security, Vlado Damjanovski.

Vlado has been in the Security Industry for over 40 years, he is currently the Product Innovation Manager at Optic Security Group in Adelaide.

Vlado has a Bachelor Degree in Electronic Engineering specialising in TV and cameras. His thesis in 1981 was on CCD image sensors, at a time when not many people knew what state imaging sensors were. Before university, Vlado had a high school degree in Mathematics at a special Mathematical High School where he happened to be in the first generation.

In Vlado's first job in Macedonia, he had to design CCTV cameras, which were tube-type at the time. His first job in Australia (1987) was Maintenance Engineer in Sydney's Channel 9. In 1988, he was head-hunted as a Service and Installation manager by Vamarc. He was then offered a job in National Fire and Security to promote a product of a young WA company that became Maxpro, it turned out to be one of the most successful video matrix manufacturers of that time, taking the world by storm.

In the 1990s, Vlado began conducting CCTV seminars that went worldwide. There were no books on CCTV so he took out a \$30k loan against his house and published a book named "CCTV". He went on to publish three more versions adopting new technologies. His fifth book, "from light to Intelligent pixels" which includes AI, Video Analytics, the latest standards 62676 and his test chart, is published by ASIAL.

As a consultant and system designer, he worked on many projects including one of the first digital CCTV systems in the world. In 1999 there were no magazines on CCTV anywhere in the world, so Vlado launched the first international magazine for CCTV, called "CCTV focus".

From 2002 to 2006, Vlado was the chairman of the Standards Australia CCTV sub-committee, and with his colleagues created the first Australian CCTV standards AS 4806. In 2015 he contributed to the IEC new digital CCTV standards adopted in 2020 as AS 62676 IP VSS Digital CCTV Standards.

In 2009 he started ViDi Labs which is still used worldwide for test charts and apps. He designed and created a smart phone application called ViDi Labs calculator, which assists installers and consultants in calculating various parameters for optimum camera settings, as well as storage requirements. When working at Optic Security, they liked his work and initiated Optic Security's own "Optic IQ" testing lab in the Adelaide office.

Sands Casino digital system, in 2002

One of the highlights of Vlado's career was the Sands Casino digital system, in 2002, whereby they installed the first large digital CCTV system, with over 1,200 cameras.

(Following that he helped install the Venetian casino with over 5,000 IP cameras.)

It was challenging because there were no similar systems as a guide, a US IT consultant was brought in who had an insufficient understanding of digital CCTV, and Las Vegas casinos still in analogue matrix technology, were not willing to embrace digital and networking CCTV technology.

For live recording and streaming of 1,200 cameras, they would need nearly 5Gb/s which was impossible at the time. In addition, if any network equipment failed, they would lose the complete surveillance system, and it was illegal for a casino to operate without a CCTV system. Fortunately, Vlado and his colleagues had already been developing casino designs for five years and had more experience and confidence in digital CCTV.

What does it mean to win the Award?

I have had many awards from all around the world. The biggest recognition is from my readers because I make it easy to understand in an industry where technologies change so much, it is impossible for one person to know it all. I have two gold medals in Mathematics from a specialised Mathematics High School and later on at Uni. I am also a recipient of a number of photographic awards, but the ASIAL Award 2023 for Individual Achievement – Technical Security is probably the dearest to me.

What do you enjoy about working in the security industry?

Great people, colleagues and friends, and always new technologies which I find interesting, and fascinating to learn about. There are many very clever colleagues, engineers, managers, directors and developers in Australia, who I enjoy working with. I still dream of seeing our CCTV systems used for many more applications such as a helping tool on farms, preventing fires, warnings about floods, saving surfers' lives, improving a manufacturing plant, doing automated stock-take, and so much more.

What would you say to someone considering a role in the security industry?

Be curious, and never stop learning. More importantly, unselfishly share your knowledge with anybody asking for help. If you don't understand it, and there is nobody to ask, study, research and understand it yourself. Be open-minded, and if you have genuine interest and curiosity to learn, this is a great industry to be a part of.