The gift of light

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At Christmas time, we all become a bit like children and there’s a tangible excitement in the air. When Menlyn Main Central Square in Pretoria wanted a Christmas tree to coincide with the festive season they had little idea that a seed of imagination would bud into a 1.6 ton steel artistic structure – which would now be permanent feature all year round – and which would bring much delight to visitors at the shopping mall.

In front of the huge tree, created from steel squares with a strong African influence, is a red mailbox for donations. Each time a person approaches the mailbox, the tree comes to life.

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The designer of the tree is Marcelle Gunter. “Our client had an idea of what they wanted,” said Marcelle. “I showed them a previous tree sculpture I had made and they initially wanted to add solar lights to the branches.” As the project went on, and without knowing how he would implement the plan, Marcelle had an idea. ‘What if he could create something with lighting and sensors?’

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The tree itself also became much larger than anticipated. “In essence it’s like a sculpture, but we followed a logical approach as we needed to build it, transport it and physically erect it ourselves without using a crane,” said Marcelle. “It’s about 1.6 tons and we used 2km of wiring inside the tree. There are 512 LED twinkle lights and Longman FacePars for ambient lighting.”

Marcelle contacted lighting consultant Joao Viegas from PPA for advice. “The whole process was spontaneous, and just like a tree kept growing,” said Joao. “I could help on the lighting side, but we obviously needed some form of control to enable the tree to twinkle and to be interactive.” He made a call to Johnny Scholtz at DWR Distribution, who then recommended fellow-colleague Nick Britz assist with the project.

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“It was an unusual concept,” said Nick. “They initially wanted some Facepars to up light the tree, and as the project went on, I showed them how we could control different zones on the branches. They were going to use twinkle lights and I thought it should have more control.”

A bigger 12 channel LED controller was added to control the zones and this enabled Nick and Joao to create some cool effects. To make the tree interactive with people, triggers were added.

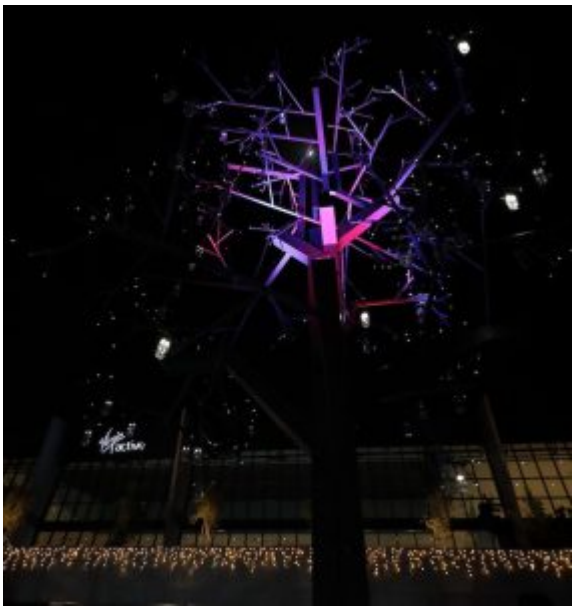


“We added motion sensors and custom PC boards were created by our very own genius Derrick Kruger in the DWR workshop,” said Nick. “What happens is as people walk up to the tree, it triggers a scene and an effect. There is also a red donation mailbox in front of the tree, where a sensor has been placed – that’s an override so when anyone gives donations it does quite a fancy effect!”

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Nick and Joao have programmed a scheduler on it. Every 15 minutes the tree changes to a different look and every hour there is a sequence or effect.

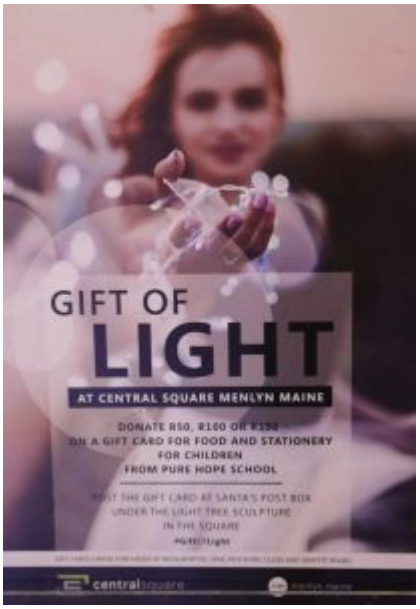
> “Amazingly the magic worked with 8 Facepars and in total 18 zones of twinkle lights,” smiles Nick. “You can remote control the tree to change scenes and colour. We didn’t add in the router for it, but we did use it to run the first show. The brain behind everything is the Nicolaudie, controlling the schedule and triggers.”



Programming took the longest part. “It was a lot of programming,” said Nick. Joao was there to help with design and give his creative input. “We could only programme at night when there was no one around as it was supposed to be a big reveal,” said Nick. Programming took place between at midnight and 6am every morning. “Even the rehearsals took place at this time and I was touched watching the children,” said Nick.

For Joao it was interesting and fun creating new colours, “Not the typical saturated colours you get form LED,” added Joao. “But obviously, we tried to incorporate festive colours.”

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The tree was officially switched on for the public at an evening titled “Gift of Light”. Here the tree formed part of a concert with various acts including performances by young violinists, drummers and acrobatic dancers, many from needy backgrounds like the Kingdom Life Children Centre and Leamogetswe Safety Home and Child and Youth Centre, singing songs like Silent Night and A child is born.

For Marcelle Gunter, who knew all things were possible, the entire project was greater and more exciting than he could ever have imagined.

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