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UCT and CodeSpace expose high school learners to the world of coding

High school learners were given a chance to tackle coding and robotics during the winter school holiday in a one-week intensive programme run jointly by the University of Cape Town’s (UCT) School of Information Technology and CodeSpace, a software training institute in Cape Town.

The six-day #RoboCampCT was a resounding success with 65 Grade 10-12 learners building a strong foundation to further their technology skills and being prepared for more advanced coding courses, including web development and robotics.

"As the School of IT, we see this as a fantastic opportunity to get more learners exposed to coding. A key challenge for many schools remains the missing infrastructure to create coding classes and make it part of the core curriculum. Availing our labs during the university holidays is a good use of the facilities but even more so, it allows students to come to campus and get inspired about what is possible!” said Professor Ulrike Rivett, Director of the School of IT.

A key aim of #RoboCampCT was to provide an environment in which learners had the time and space to think about why they might want to learn to code. They also learned how to use ‘Design Thinking’ – a methodology used to tackle complex problems – to create solutions to real-world issues.

"We were excited to see the impressive level of learning and engagement that took place,” says Emma Dicks, co-founder of CodeSpace. The UCT campus provided an ideal location for the courses, and the team of facilitators were joined by professionals from influential industries around South Africa. Their insights gave learners a look into the opportunities that await them when they enter the world of tech.

The robotics part of the camp grabbed the learners’ attention because it was so tactile and visual: writing a line of code makes it possible to move an actual 3D object. These lessons were memorable as learners got their robots to ‘come to life’ and move around.

The learners came from the Western Cape and beyond, with organisations such as the Allan Gray Orbis Foundation enrolling a group of learners. The camp focused on
enabling students to learn the basics of the new language of technology. Learners can begin to code in any programming language. Once they understand programming principles and how to do the basics, they can transfer that to the specific use of programming robotics. This is a crucial skill for future professionals as it allows them to use technology to enhance whatever job they are doing.

Several tech professionals from various fields joined the camp to share how they use technology and coding in their careers, from 3D printing and graphic design to medicine and finance. “It was a really fun and engaging experience. You’ll learn valuable skills you didn’t know existed, and it will provide you with good insight into the careers you can pursue in the realm of technology,” said Luqmaan Ryklief, one of the learners participating in the project.

The camp was so successful that two more have already being planned for the December holiday, the first from 9-14 December and the second from 16-21 December. Sign up here: https://www.codespace.co.za/courses/high-school-coding-robotics-holiday-camp

Photos:

For more information:

School of IT - http://www.sit.uct.ac.za/
CodeSpace - https://www.codespace.co.za/
Video footage from the July camp: https://youtu.be/I5gc0mAgDGQ