

SHORT BIO: Michael Ettershank b.1967

Michael Ettershank returned to South Africa in 2000 after working for a software company in the USA where he was involved in preparing customers for the Y2K changeover. When he returned to South Africa he worked for an online learning start-up that was part of JSE-listed company Naspers.

On a part time basis he started experimenting with teaching teenagers about electronics at the Kids Haven shelter for homeless children in Benoni (a Nelson Mandela Childrens Fund charity) but found they struggled with abstract concepts.

His daughter Jasmine was born in 2004 upon which occasion he decided to explore whether using an imported robot from the USA could enhance STEM teaching in South Africa. He spent the next few years exploring how to reduce the cost of the robot by having the learners build the robot locally.

A pilot robotics programme for the Gauteng Department of Education was held at Sci-Bono in Newtown, Johannesburg, in 2012 where teenagers built the robot. Two other pilot robotics programmes were held at private schools. In 2013 high school learners Dylan and Marco, trained by Michael in the private school programme, placed second in the world at the World Robotics Olympiad (WRO) Indonesia.

In 2014 University of Johannesburg invited Michael to bring the RobotScience project to UJ TechnoLab on Saturday mornings with a small grant from the Shuttleworth Foundation.

In 2015 he joined UJ TechnoLab on a full time basis, and the AfrikaBOT 'the world's most affordable robotics competition' was launched, the first and second successful competitions being held in 2016 and 2017.

<https://www.youtube.com/watch?v=qvLIO-As2eU>  
<https://www.youtube.com/watch?v=IRr5Z9V6UaQ>

In 2015, 2016 and 2017 Michael Ettershank was an organiser and trainer in the first three First Avenue Institute Girls Winter Camps, a June/July holiday experience for young black disadvantaged women to encourage them to consider a career in maths and science related fields.

<https://www.youtube.com/watch?v=J4h6wMPL6IE>

On an ongoing basis Michael Ettershank is involved in efforts to create sustainable robotics programmes at UJ TechnoLab, schools in low income communities as well as offer online teaching materials that all schools can use to enhance the quality of STEM education in South Africa.

In 2017 a leading Johannesburg private school implemented robotics as an in-curriculum technology subject using the robot developed by Coach Michael, becoming the first school in South Africa to offer robotics in the classroom as opposed to the usual route of robotics as an extra-curricular activity.

<https://www.youtube.com/watch?v=E9jd2l0WtN4>

Michael Ettershank has a humanities degree from University of Witwatersrand (1987) and Rhodes University (1990).