HCI Education in the Fourth Industrial Revolution

The Fourth Industrial Revolution is changing the world in how we work, love, play and learn. These changes are rapidly spreading globally and we hear often how many jobs will be lost, especially in Africa. New jobs will be created, but these require rapid reskilling and upskilling. The entire education landscape is also changing rapidly with the role of universities and degrees increasingly questioned.

The field of HCI as one of the drivers of Industry 4.0, has also undergone many changes and an unprecedented growth rate. This growth and evolution means that the field has become more diverse with for example many new geographies, populations, methods, techniques and interactions. However, the fusion of cyber and physical worlds does away with distinct entities as computers and humans interacting, requiring a paradigm shift.

Despite these changes, HCI still operates on a working definition and curriculum developed in 1992. Although research into HCI education has been conducted since 2011 globally and a global living curriculum had been proposed, this living curriculum still remains elusive. The living curriculum has been workshopped at several conferences and Summer Schools, but seems to remain in the starting blocks.

I will take the audience on a journey to view the changing HCI education landscape especially in an African context. I will then discuss some challenges and recommendations facing an inclusive, diverse, global and responsive HCI curriculum.

AUTHOR BIO
Anicia Peters (PhD) is a native of Namibia and the Executive Dean of the Faculty of Computing and Informatics at the Namibia University of Science and Technology.

She obtained both her PhD and MSc degrees in Human Computer Interaction at Iowa State University in the United States. She completed her PhD under a Fulbright International Science and Technology Award and a Schlumberger Faculty for the Future Women in Science fellowship. She also received a Google Anita Borg Memorial Scholarship in 2012. She completed a post-doc at Oregon State University under Professor Margaret Burnett. She earned two undergraduate degrees (*cum laude*) from the Namibia University of Science and Technology. She received several academic accolades both in Namibia and the United States.

Currently her research work focuses on social computing, gamification, and e-participation (gender and gender-based violence technologies, digital government, youth and marginalized groups).

Besides 11 years of experience in academia, she also has 17 years of industry experience ranging from developing and deploying large scale systems for the Government of Namibia to interning at Intuit in Silicon Valley.

In Namibia, she started several initiatives such as the Namibia Women in Computing and 3 chapters of the Association of Computing Machinery (ACM) including a SIGCHI and an ACM_W chapter. She chaired the International Culture and Computer Science Conference in Windhoek in October 2016. Anicia also initiated and co-chaired the inaugural Africa Human Computer Interaction Conference (AfriCHI) in Nairobi, Kenya in November 2016 and serve as special advisor to AfriCHI2018 to be held in Windhoek, Namibia from 3-7 December 2018.

In February 2017, she was featured as one of twenty prominent personalities in Namibia's Who's Who for 2017. She was also selected as one of 10 African Women in Technology Rolemodels across Africa who is showcased through videos as inspiration to young girls across Africa. In 2018, Next Einstein Forum recognised her for her efforts in advancing Women in Science, Technology, Engineering and Mathematics (STEM).

She is currently the Vice-Chair for the Namibia Qualifications Authority (NQA) and a Council member on the Namibia Council for Higher Education (NCHE). She further serves as a board member of the Internet Society Namibia Chapter and on the ACM SIGCHI Gary Marsden Student Fellowship Committee.

In addition to being a Dean, Board member, Technologists, Researcher and Community Volunteer, she and her husband are parents to four girls and guardians of another two girls. Anicia's oldest daughter majors in Statistics at Iowa State University in the US.