

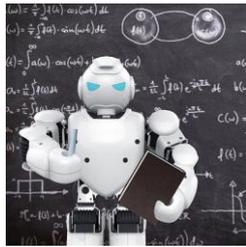
## ECEL 2023

### 22nd European Conference on e-Learning

26 – 27 October 2023, Pretoria, South Africa

#### Mini Track on Teaching the Principles of Robotics in Education: Community of practice, engagement, and robotics resources

Mini Track Chair: Dr Patricia M Gouws, University of South Africa (Unisa), South Africa



Students require 21st century thinking skills to successfully navigate a world that increasingly adopts technology. These skills include collaboration, creativity, innovation, problem-solving, critical thinking teamwork, communication, and computational thinking. Can we as guardians of the education process promote the introduction of these fundamentals in the principles of programming and the development of 21st century skills to educators, students, facilitators, and community leaders?

We now need to teach, facilitate, and coach robotics as part of the education curriculum in an evolving environment. And competent and confident coaches of robotics need to be upskilled and equipped to ensure competent and confident robotics learners. One strategy is the development of a community of practice, that includes member engagement and the sharing of resources within a massive open online course (MOOC).

This mini-track will have a strong focus on the challenges and opportunities of the journey within the advancement of robotics in education.. Suggested subjects focusing on Content Design are (but not limited to):

- Developing a community of practice for robotics in education
- Developing online resources to support educators of robotics
- Using Massive Open Online Courses (MOOCs) for the sharing of robotics education resources
- Promoting the pedagogy of robotics in education
- Advancement of robotics education through technology
- Opportunities for introducing robotics in education – an Africa focus



**Dr Patricia M Gouws** (PhD Information Systems) is a Senior Lecturer in the School of Computing (Department of Information Systems) at the University of South Africa. She has spent more than 20 years teaching and research programming. She is also the project leader for the Inspired towards Science, Engineering and Technology (I-SET) robotics project. The I-SET engaged scholarship flagship project has been using robotics to inspire science since 2009. The project is part of the Unisa Science Engagement Centre (USEC), a national accredited science center of South Africa, of which Dr Patricia M Gouws is the Director.

#### Submission details

In the first instance a 300 word abstract is required, to be received by the **5<sup>th</sup> April 2023**. Submissions must be made using the online submission form at: <http://www.academic-conferences.org/conferences/ecel/ecel-abstract-submission/>

If you have any questions about this track please email the mini track chair: [gouwspm@unisa.ac.za](mailto:gouwspm@unisa.ac.za)

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