



SACLA 2026 Conference Programme

Wednesday, 15 July 2026		
13:00 - 17:00	Registration	Foyer
14:00 - 17:00	SACLA HoD's Colloquium	Executive Room, Block B
17:00 - 17:30	Tea / Coffee	Executive Room, Block B
17:00 - 18:00	SACLA Executive Committee Meeting	Executive Room, Block B
19:00 for 19:30	SACLA 2026 Welcome Cocktail	Two Oceans Aquarium

Thursday, 16 July 2026

07:30 - 08:00	Registration	Foyer
08:00 - 08:30	Official Conference Opening & Welcome	Venue 1-2 Combined
08:30 - 09:00	Oracle Sponsor Presentation	Venue 1-2 Combined
09:00 - 10:00	Keynote Address: What are we really preparing students for? — Speaker: JT Janse van Rensburg	Venue 1-2 Combined
10:00 - 10:20	Short break (Venue setup for parallel tracks)	Foyer / Venues
Time	Track A (Venue 1)	Track B (Venue 2)
	<i>Session 1A: Information Systems Education</i> <i>Session Chair: Janet Liebenberg</i>	<i>Session 1B: Emerging Technologies & VR</i> <i>Session chair: Japie Greeff</i>
10:20 - 10:40	"IT Governance Education: Reflections from a South African Postgraduate Programme" — Authors: Lynn Futcher, Mariana Gerber, Hettie Booysen and Johann Botha	"First-Year Computer Science and Informatics Students' Experiences of an Immersive Virtual Reality Application for Computer Hardware Assembly" — Authors: Nadean Barkhuizen, Benjamin Botha and Lizette de Wet
10:40 - 11:00	"Evaluating the Undergraduate Information Systems Curricula in South African Universities" — Authors: Kenneth Mashingaidze and Thembekile Mayayise	"Virtual Reality as a Method for Training Undergraduate Computer Science Students in CAT6 Network cable Termination: A Pilot study" — Authors: Maruping Kometsi and Benjamin Botha
11:00 - 11:20	"Towards Developing Business Process Analyst Competencies through Higher Education Curriculum" — Authors: Elizabeth Wamicha and Lisa Seymour	"A Concept Difficulty Analysis of Learning in a Flipped Distributed Systems Course" — Authors: Ijeoma Ezeji, Pragasen Mudali and Matthew Adigun
11:20 - 11:50	Mid-Morning Tea & Coffee Break	Foyer

Thursday, 16 July 2026 (Continued)

	Session 3A: Curriculum Alignment Frameworks <i>Session chair: Carolien van den Berg</i>	Session 2B: Cybersecurity & Academic Integrity <i>Session chair: Dirk Snyman</i>
11:50 - 12:10	"Perceptions of CS2023 and Accreditation in Africa: Opportunities and Challenges for Building Globally Competitive Computing Programmes" — Authors: Janet Liebenberg and Karen Bradshaw	"Navigating the Dual-Use Dilemma: Educational Benefits vs. Criminal Misuse of Accessible Attack Platforms" — Authors: Tapiwa Gundu
12:10 - 12:30	"The Cross-Module Integration Model (CMIM): Integrating Cross-Module Competencies in Undergraduate Computing Education" — Authors: Luke Coetzee, Michael de Jager and Lance Bunt	"Over-reliance on Artificial Intelligence by programming students at a South African university" — Authors: Kabelo Mosala and Walter Uys
12:30 - 12:50	"Aligning South African Undergraduate Computer Science Curricula to Job Requirements and Standard Knowledge Framework using Machine Learning" — Authors: Oluwafemi Oriola and Eduan Kotzé	[No talk scheduled]
12:50 - 13:50	Lunch Break (1 Hour)	Stonebreakers Restaurant
	Session 2A: Learning Analytics & Automated Assessment <i>Session chair: Andre Calitz</i>	Session 3B: Software Engineering Education <i>Session chair: Aslam Safla</i>
13:50 - 14:10	"Semi-Automated Rubric-based Assessment for Computer Graphics Assignments" — Authors: Tristan Potgieter, Linda Marshall and Cobus Redelinghuys	"Attributes Influencing the Adoption of Test-Driven Development: An Empirical Investigation Among Novice Programmers" — Authors: Pieter Kruger and Guillaume Nel
14:10 - 14:30	"Automated Detection of Design Patterns using Vector-Based Graph Matching for Assessment" — Authors: Layla Olivier, Linda Marshall and Francois Redelinghuys	"A Comparative Case Study of Undergraduate Software Engineering Modules in Germany and South Africa" — Authors: Christian Kücherer, Brenda Scholtz and Janine Nel
14:30 - 14:50	"Automatic Detection of Pedagogical Misalignment Using Pretrained Language Models" — Authors: Deborah Olaniyan and Ruth Wario	"Designing Immersive Virtual Reality Learning Environments for Software Engineering: A Reflective Study" — Authors: Thirumala Naidoo and Sunet Eybers
14:50 - 15:10	Afternoon Tea & Coffee Break	Foyer

Thursday, 16 July 2026 (Continued)

	Session 4A: Student Engagement & Retention <i>Session chair: Michael de Jager</i>	Session 4B: AI & Language Models in Higher Ed <i>Session chair: Walter Uys</i>
15:10 - 15:30	"Beyond Satisfaction: Belonging Uncertainty, and Structural Attrition Risk in South African Computer Science Education" — Authors: Rouxan Fouché and Eduan Kotzé	"Generative AI: Insights from South African Higher Education Institutions" — Authors: Estelle Taylor, Andre Calitz and Margaret Cullen
15:30 - 15:50	"From Participation to Performance: The Impact of Gamified Engagement on First-Year Programming Academic Outcomes" — Authors: Marisa Venter	"Rethinking Presence in ODeL: Extending the Community of Inquiry Framework with Quasi-Presence in the Context of Generative AI" — Authors: Ronell van der Merwe
15:50 - 16:10	"Beyond Syntax: Metacognitive Enactment and Bottlenecks in CS1 Problem-Solving" — Authors: Karabo Matabane and Liezel Nel	"IS Education in the Age of GenAI: The Case for IBL and Adapted Assessment Models" — Authors: Malcolm Garbutt and Carolien van den Berg
16:10 - 17:00	Dinner Preparation Buffer & Relaxation Window (50 Mins)	Breakwater Lodge Hotel
17:00	Bus Departs for Conference Dinner	Main Entrance
18:00 - 21:30	SACLA 2026 Conference Dinner	The Tangram Restaurant (Durbanville Hills Winery)
22:00	Bus Returns	Breakwater Lodge Hotel

Friday, 17 July 2026

07:30 - 08:30	Registration	Foyer
08:30 - 08:40	Plenary: Sponsor Introductions	Venue 1-2 Combined
08:40 - 08:55	Sponsor Presentation: IITPSA (15 Min)	Venue 1-2 Combined
08:55 - 09:10	Sponsor Presentation: CITANDA (15 Min)	Venue 1-2 Combined
09:10 - 09:30	Short break (Venue setup for parallel tracks)	Foyer / Venues
Time	Track A (Venue 1)	Track B (Venue 2)
	<i>Session 5A: Inclusion & Sustainability Session chair: Bennie Botha</i>	<i>Session 5B: Graduate Competencies & Industry Links Session chair: Annette van der Merwe</i>
09:30 - 09:50	"Integrating Artificial Intelligence Technologies into Higher Education to bridge the Digital Divide Gap for Learners" — Authors: Michele Devoti, Guidance Mthwazi and Adheesh Budree	"Industry Perspectives on Industry Advisory Board Effectiveness in IT Higher Education" — Authors: Estelle Taylor, Andre Calitz and Margaret Cullen
09:50 - 10:10	"Walking Before Running: A Staged Scaffolding Model for Fundamental Programming Skills" — Authors: Mokotsolane Mase and Liezel Nel	"Fundamentals First: A Reflective Design Science Framework for IT Graduate Programme Development" — Authors: Jt Janse van Rensburg
10:10 - 10:30	"Looking back before we look to the future: reflecting on a sustainable-smart transdisciplinary student project" — Authors: Carolien van den Berg and Belinda Verster	"The Problem of Bachelor's Dissertations in Computer Science, Informatics, and similar Academic Disciplines: an Experience-based Discussion" — Authors: Stefan Gruner and Linda Marshall
10:30 - 11:00	Mid-Morning Tea & Coffee Break	Foyer

Friday, 17 July 2026 (Continued)

	Session 6A: AI Pedagogies & Methodologies <i>Session chair: Estelle Taylor</i>	Session 6B: Postgraduate Supervision & Design models <i>Session chair: JT Janse van Rensburg</i>
11:00 - 11:20	"Integration of Generative AI tools into the Programming Pedagogy: A conceptual framework" — Authors: Meke Kapepo, Salma Elfekri, Selwa Elfirdoussi and Hind Kabaili	"Redesigning an Honours Research Methodology Mod-ule Using a Hybrid Agile Approach to Enhance Student Self-Efficacy: An Analytical Autoethnography" — Authors: Marie Hattingh
11:20 - 11:40	"Understanding the Effect of Foundations Before Automation in AI-Assisted Programming Education: A Proposed Statistical Approach" — Authors: Michael Ajayi, Khulekani Mavundla and Jan Mentz	"The Value of Including a Research Alignment Plan in Honours Project Supervision" — Authors: Andre Calitz and Margaret Cullen
11:40 - 12:00	"Prompt Development: A Critical Realist's Approach to AI-supported Thematic Analysis" — Authors: Mark Brand, Jean Greyling and André Calitz	"Integrate Practice with Theory: A Design Model for Introducing Applied Security Thinking in Information Security" — Authors: Michael de Jager and Imelda Smit
12:00 - 13:00	SACLA 2026 AGM, Closing Remarks & Acknowledgments	Venue 1-2 Combined
13:00 - 14:00	Lunch & Departure	Stonebreakers Restaurant

SPONSORS



CITANDA

Centre for **IT** and
National Development
in Africa

Keynote address | Thursday, 16 July | 09:00 - 10:00

Keynote Address: What are we really preparing students for?

— Speaker: JT Janse van Rensburg

This keynote is sponsored by the UCT Centre for IT and National Development in Africa (CITANDA)

Venues 1-2 Combined

Computer Science has never evolved as rapidly as it is today. New technologies emerge almost daily, AI is reshaping how software is developed, and universities face increasing pressure to produce graduates who are "future ready." But amidst all this change, one question has become increasingly difficult to answer: What are we really preparing students for?

After spending more than a decade teaching Computer Science, researching the gap between university and industry, and then crossing into industry to design graduate programmes and AI capability initiatives, Prof. JT Janse van Rensburg has had the unusual opportunity to observe the same challenge from both sides of the classroom.

This keynote is a reflection on that journey. Rather than focusing on the latest technologies, it invites the audience to step back and reconsider the enduring purpose of Computer Science education. In a profession where the tools change constantly, what should never change? Perhaps the most important lessons for preparing graduates for the future are not the newest ones at all.

Prof JT Janse van Rensburg is an AI Strategist at iqbusiness and an Extraordinary Professor at the Optentia Research Unit at North-West University. Her career has been defined by a single question: how do we prepare Computer Science graduates for successful professional practice?

JT spent more than a decade in academia teaching Computer Science, supervising postgraduate research, and completing a PhD that developed practical guidelines for bridging the gap between IT theory and industry practice. Her research focused on graduate capability, project-based learning, reflective practice, and strengthening collaboration between universities and industry.

Seeking to test those ideas beyond the classroom, JT transitioned into industry, where she worked in consulting, agile delivery, programme management, and graduate development before moving into AI strategy and organisational capability enablement. She has since designed and led graduate programmes, advised organisations on AI adoption, and helped teams navigate the changing relationship between technology, learning, and work.

Having worked on both sides of the university-industry divide, JT brings a rare perspective to the future of Computer Science education. Her keynote draws on more than fifteen years of research and practice to explore what has changed, what has remained constant, and what that means for preparing the next generation of computing professionals.



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