

**FOURTH INDUSTRIAL REVOLUTION SUMMIT**



Central University of  
Technology, Free State



MICTSETA



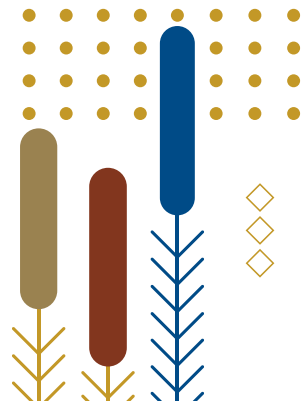
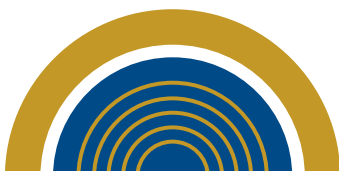
FREE STATE PROVINCE

## **THE 2ND FREE STATE 4IR SUMMIT**

**21 – 22 July 2022 | CUT | Boet Troskie Hall | 09:00 - 16:30**

**Accelerating economic growth and development of the  
Free State through innovative 4IR technologies adoption for  
eradicating poverty and unemployment**

## **PROGRAMME**



## The 2nd Free State 4IR Summit

# DAY 1 | Thursday, 21 July 2022

### PART 1

07:30 - 09:00 Arrival and Registration of Delegates

**PROGRAMME DIRECTOR: Ms Palesa Chubisi**

09:00 - 09:10 Welcome remarks on behalf of Government: **Mr. Godfrey Mahlatsi**, Head of Department: Free State Health

09:10 - 09:30 Summit Rationale: **Prof. A. Ngowi**, Acting Vice-Chancellor: Central University of Technology

09:30 - 09:40 Introduction of Lead Keynote Speaker: **Prof. Mashele**, Acting Deputy Vice Chancellor: Research, Innovation and Engagement, Central University of Technology

09:40 - 10:10 Lead Keynote Address: South Africa Leveraging Net-zero & Circular Economy via 4IR **Prof. Seeram Ramakrishna**, National University of Singapore

10:10 - 10:20 Introduction of the Premier: **Hon. Gadija Brown**, MEC: Free State Provincial Treasury

10:20 - 10:40 Address by the Premier of the Province: **Hon. Sefora Ntombela**, Premier: Free State Province

10:40 - 10:50 Introduction of Minister of Communication and Digital Technologies: **Mr. Simphiwe Thobela**, Board Chairperson: MICT SETA

10:50 - 11:30 Address by the Minister of Communication and Digital Technologies: **Hon. Khumbudzo Ntshavheni**, Minister: Telecommunication and Digital Technologies

11:30 - 11:40 Vote of Thanks: **Mr. Makalo Mohale**, MEC: Free State DESTEA

11:40 - 12:00 Opening of Exhibition Arena: **Mr. Godfrey Mahlatsi**, Head of Department: Free State Health

12:00 - 12:30 Tea Break

### PART 2

12:30 - 12:50 Keynote Presentation: 3D Printing for Socio-economic Advancement **Dr. Gerrie Booysen**, Centre for Repid Prototyping and Manufacturing

12:50 - 13:00 Q & A

13:00 - 14:00 Lunch

14:00 - 14:30 Presentation and Demonstration: Spotty, the Artificial Robot Dog  
Institute of Intelligent Systems, University of Johannesburg

### Session 1: Small Business and Youth Development

14:30 - 14:50 Keynote Lecture: Small Business Development in the 4IR Environment: **Mr. Loyiso Tyira**, Board Chairperson: ICT SMME CHAMBER

14:50 - 15:00 Topic : Management and Governance of the .ZA namespace  
**Mr. Molehe Wesi**, Chief Executive Officer: ZADNA

15:00 - 15:10 Topic : Industrial Internet of Things  
**Mr. Priv Reddy**, Chief Executive Officer: AFRICAN UTILITY

15:10 - 15:20 Topic : Skills for SMB's  
**Mr. Asif Valley**, National Technology Officer: MICROSOFT SA

15:20 - 15:30 Topic : Shaping South Africa Through Robotics  
**Mr. Teboho Ntsinyi** (Paul), Chief Technology Officer & Cofounder: JP4IR

15:30 - 15:40 Topic : Winds of change. Disruptive Innovation Out of Necessity  
**Mr. Itumeleng Letsaba**, Co-Founder & CEO: Next Curve Creations

15:40 - 16:00 Panel Discussion

# DAY 2 | Friday, 22 July 2022

08:30 - 08:45 Welcoming of Delegates and Logistics of the Day: Programme Director

08:45 - 09:00 JENDAMARK: **Dr. Y. Naidoo**

09:00 - 09:15 Presidential 4IR Commission: Strategic Implementation Plan, **Mr. Phila Sithole**, Department of Communication and Digital Technologies

### Presentations from CUT at Plenary

09:15 - 09:30 Block Chain Smart Contract: **Mr. Mokoalusi and Dr. Monyane** (FSDoE)

09:30 - 09:45 Smart Water Bottling Plant: **Dr. Kuriakose**

09:45 - 10:00 Solar Car Project: **Prof. Luwes**

10:00 - 10:30 Tea Break

### COMMISSION BREAKAWAYS

#### Commission 1:

**Education, Training and Employability**  
Venue: Boet Troskie (Plenary Venue)  
Facilitator: **Dr Nokwequ (HOD: DESTEA) and Prof Setlalentoa (CUT)**

10:30 - 11:00  
Keynote Presentation: The Knowledge Metaverse for Learning, Training and Performing, **Dan Lejerskar**, EON VR/MR

11:00 - 11:10  
Cybersecurity and creating security by design systems in the age of the 4th industrial revolution, **Ms. Doreen Mokoena**, Chief Executive Officer: Cybersec Clinique

11:10 - 11:20  
Social Institutions and the Fourth Industrial Revolution, **Prof. Mpho Raborife**, Associate Professor: University of Johannesburg

#### Commission 2:

**Healthcare**  
Venue: Prosperitus Auditorium  
Facilitator: **Prof Mashele**

10:30 - 11:00  
Keynote Presentation: 4IR and Applied Clinical Genomics, **Dr. Jacob Poo** (Meditech SA) and Prof Collen Masimirembwa (African Institute of Biomedical Science & Technology)

11:00 - 11:10  
Re-engineering, Health Access for the Entire Population, **Dr. Raymond Cambell**, Chief Executive Officer: Phulukisa Health Solutions

11:10 - 11:20  
Enhancing patient care through a learning healthcare system and machine learning  
**Dr. Michael Pienaar**, Centre for Digital Futures: UFS

### Commission 1:

#### Education, Training and Employability Venue: Boet Troskie (Plenary Venue)

11:20 - 11:30

Preparing Youth for Careers in 4IR: Empowering and Overcoming the Digital Divide,  
**Mr. Arthur Wade Anderson**,  
CEO: Forge Academy & Labs

11:30 - 11:40

Unlocking FS industrial potential through business incubation programmes, **Mr. Ayanda Ndinise**, CEO: Softstart Business and Technology Incubator NPC

11:40 - 11:50

Free State Digital Economy Masterplan  
**Mr. Pieter Grootes**,  
Director: Fides Advisory Committee

11:50 - 12:00 - Panel Discussion

### Commission 2:

#### Healthcare Venue: Prosperitus Auditorium

11:20 - 11:30

Advancing Nuclear Medicine,  
**Dr. Osayande Evbuomwan**, Nuclear Medicine  
Specialist: UFS

11:30 - 11:40

Digital Health, **Prof. Robin Pillay**,  
Chief Innovation Officer – Heersink  
School of Medicine

11:40 - 11:50

SMART Wheel Chairs,  
**Prof. Elisha Markus**,  
Centre for Sustainable Smart Cities, CUT

11:50 - 12:00 - Panel Discussion

### Commission 3:

#### Agriculture | Venue: Boet Troskie Hall (Plenary Venue) Facilitator: Dr Masiteng (HOD: Agriculture) and Prof Sedibe (CUT)

12:00 - 12:30

Keynote Presentation: AI-Agriculture 5.0  
**Prof. Pius Owolabi**, MICT SETA Research Chair (TUT)

12:30 - 12:45

A Verbal Presentation on the Prospects of 4IR in the South African Agricultural Context, **Mr. Kasilan Naidoo**, MD, Corporate Innovation: StartUpBootCamp

12:45 - 13:00

Pioneering SmartAgric through IoT, **Mr. Kagiso Moremi**,  
New Business Lead: IoTnxt

13:00 - 13:15

Pasture Management using Digital Twins  
**Junia Lemphane, Dr. Kotze and Dr. Kuriakose**, CUT SMART Farm

13:15 - 13:30

Harnessing of the 4IR to promote Sustainable and Resilient Food Security  
**Mr. Thabo Olivier**, Skills Trainer for Sustainable Small Scale Farming

13:30 - 14:00

Panel Discussion

14:00 - 15:00

**LUNCH**

### PLENARY SESSION

15:00 - 15:10

CUT's Response to the Presidential Commission on 4IR, **Prof. LOK Lategan**, CUT

15:10 - 15:30

Open Session (Reflections) - Programme Director

15:30 - 16:00

Resolutions and Action Plan - **Dr. Phera**,  
Co-Chair of the Free State 4IR Steering Committee, FSPG

16:00 - 16:15

Closing Speech - **Mr. Gregory Brown**, Co-Chair of the Free State 4IR  
Steering Committee, MICT SETA

