



Graduation Programme

The Future. Reimagined.





Dear UJ Graduate

At the University of Johannesburg (UJ), graduation not only signifies an academic milestone but also represents the emergence of a new cohort of leaders. Our objective has been to empower you as leaders who are primed to face the challenges of an ever-changing world defined by a plethora of challenges and opportunities. As you navigate these great societal shifts, we hope that your time at IJJ will serve as a constant source of reference and inspiration. As we have sought to demonstrate, the Fourth Industrial Revolution (4IR) presents the opportunity for the exploration of new and exciting spheres, and you are uniquely poised to navigate this terrain. Our focus at IJJ has been to create graduates who are

agile, curious, and able to be active participants against this backdrop.

Your graduation today serves as a celebration of this momentous achievement! I want to take this opportunity to remind you that you now represent the privileged few in our country. You are uniquely poised to address some of the serious challenges we face and a qualification from IJJ will stand you in good stead!

At U J, you have encountered the finest academic minds from diverse backgrounds, spanning across the world as well as innovative technology-rich approaches to teaching and learning. As a result, UJ's global stature and academic robustness are recognised by the most

prestigious global higher education ranking systems in the world. IJJ has become a competitive player, not only in South Africa but also on the continent. You are an important part of this story.

We welcome you as a new member of our esteemed alumni community, which is making a lasting impact on society. We encourage you to join the IJJ Alumni Network and become an active member of the University Convocation, which affords you an opportunity to make a significant contribution to our academic projects and beyond. Our promise in return to you is that we will continue to build IJJ as an international university of choice, anchored in Africa, dynamically shaping the future.

Congratulations on this significant achievement. We look forward to witnessing you reimagine the future!

Prof Letlhokwa Mpedi
Vice-Chancellor//or and Principal
University of Johannesburg

**Welcome to the
Graduation Ceremony of the
University of Johannesburg
27 February 2023 at 16:30**

**Welkom by die
Gradeplegtigheid van die
Universiteit van Johannesburg
27 Februarie 2023 om 16:30**

**Le a Amogelwa
Moletlong wa Dikapešo wa
Yunibesithi ya Johannesburg
27 Dibokwana 2023 ka 16:30**

**Niyamukelwa
eMcimbini wokweThweswa kweZiqu
weNyuvesi yaseJohannesburg
27 kuNhlolanja 2023 ngele-16:30**

UNIVERSITY OF JOHANNESBURG

CHANCELLOR

Dr P Mlambo-Ngcuka

BA Ed (Lesotho), MPhil (UCT), DTech Ed (Warwick, England)

MEMBERS OF THE MANAGEMENT EXECUTIVE COMMITTEE

VICE-CHANCELLOR AND PRINCIPAL

Prof T Marwala

(Until 28 February 2023)

BS Eng (Case Western Reserve, USA), MEng (UP), PhD (Cambridge,
UK)

Prof LG Mpedi

(From 1 March 2023)

B Juris, LLB (Vista), LLM (RAU), LLD (UJ)

DEPUTY VICE-CHANCELLOR: ACADEMIC

Prof LG Mpedi

(Until 28 February 2023)

B Juris, LLB (Vista), LLM (RAU), LLD (UJ)

Prof S Khan

(From 1 March 2023)

BSc, BSc Hons, MSc, PhD (UWC)

**DEPUTY VICE-CHANCELLOR: RESEARCH AND
INTERNATIONALISATION**

Prof S Sinha

BEng, MEng, PhD (UP)

REGISTRAR

Prof IC Burger

(Until 31 March 2023)

BA, HEd, BA Hons, MA, PhD (RAU)

Prof B van Vuuren

(From 1 April 2023)

BSc, BSc Hons, MSc, PhD (UP)

CHIEF FINANCIAL OFFICER

Ms N Mamorare

BCom (Rhodes), BCom Hons (UKZN), CA (SA)

CHIEF OPERATING OFFICER

Dr M Ralephata

BSc Eng (Wits), MBA (UOVs), MSc, DBA (Heriot-Watt, UK)

SENIOR EXECUTIVE DIRECTOR

Dr N Vukuza

BA (Fort Hare), BA Hons (Rhodes), DTE (UNISA), MA (Wits),

PhD (SUN)

GENERAL COUNSEL

Mr D Pretorius

BCom, LLB, LLM (NWU)

EXECUTIVE DEANS

COLLEGE OF BUSINESS AND ECONOMICS

Prof L Ntsalaze

BCom, BCom Hons (NMMU), MPhil (UCT), PhD (SUN)

FACULTY OF ART, DESIGN AND ARCHITECTURE

Prof D Smal (Acting)

NDip, NHDip Clothing (TP), MTech Fashion (TUT), DTech Design
(CPUT)

FACULTY OF EDUCATION

Prof N Petersen

BA Ed (UNISA), BEd Hons, MEd (RAU), DEd (UJ)

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

Prof DJ Mashao

BSc Eng, MSc Eng (UCT), MSc AM, PhD (Brown, USA)

FACULTY OF HEALTH SCIENCES

Prof A Temane (Acting)

BNSc (UNW), MCur (RAU), PhD (UJ)

FACULTY OF HUMANITIES

Prof K Naidoo

BA, BA Hons, MA (UDW), DTE (Unisa), PhD (Manchester, UK)

FACULTY OF LAW

Prof W Domingo

B SoSc (UCT), LLB (UWC), LLM (Columbia, USA),
SJD (Wisconsin-Madison, USA)

FACULTY OF SCIENCE

Prof D Meyer

BSc, BSc Hons, MSc (RAU), PhD (California, USA)

DEAN

JOHANNESBURG BUSINESS SCHOOL

Prof R Carolissen

MSc (UWC), MBA (SUN), MCom (NWU), PhD (UWC)

MEMBERS OF COUNCIL

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Mr M Mahlasela
Mr M Manana
Prof T Marwala
Dr A Mokoena
Ms N Molope
Prof LG Mpedi
Mr LM Mpunzi
Ms NP Mvubu
Dr WP Rowland
Ms JA Schreiner
Prof A Strydom
Ms T Thobejane

PRESIDENT OF CONVOCATION

Mr LM Mpunzi

Gaudeamus Igitur

Gaudeamus igitur,
Juvenes dum sumus;
Post iucundum iuventutem,
Post molestam senectutem
Nos habebit humus.
Vivat academia,
Vivant professores,
Vivat membrum quodlibet,
Vivat membra quaelibet;
Semper sint in flore!

English

Let us rejoice, therefore,
While we are young.
After a pleasant youth
After a troubling old age
The earth will have us.
Long live the academy!
Long live the professors!
Long live each student;
Long live the whole fraternity;
For ever may they flourish!

Sesotho sa Leboa

Ka gona, a re thabeng,
Re sa le ba bafsa.
Ka morago ga bofsa bjo bo bose
Ka morago ga go tšofala mo go nago
le mathata
Lefase le tla ba le rena.
Phela thuto phela!
Phelang diprofesa phelang!
Phelang baithuti phelang;
Phela kagišano ka botlalo phela;
O ka re ba ka phela gabotse
goyagoile!

Afrikaans

Laat ons dan vrolik wees,
Terwyl ons jonk is;
Na 'n aangename jeug.
Na 'n onaangename oudag,
Sal die aarde ons hou.
Lank lewe die universiteit,
Lank lewe die professore,
Lank lewe elke student,
Lank lewe al die studente,
Mag hulle vir ewig hul jeug behou!

Zulu

Ngakho, masithokoze
Sisebasha nje.
Emva kobumnandi bobusha
Emva kwezinkinga zobudala
Umhlaba uzosithatha.
Phambili ngemfundo!
Phambili boSolwazi!
Phambili nakuwe mfundi;
Phambili ngenhlangano yonke;
Maziqhubeke ngonaphakade!

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT QUALIFICATIONS

1. Diploma | National Diploma

Lephuting, Modiehi Lettia (Engineering: Electrical)

2. Bachelor of Engineering Technology

Baloyi, Cavin (Electrical Engineering)

Baloyi, Musa (Electrical Engineering)

Cekiso, Akhona (Electrical Engineering)

Chothia, Muin (Electrical Engineering)

Daniels, Bilal Mastood (Electrical Engineering)

Govuza, Sisonke Steven (Electrical Engineering)

Gumede, Talent (Electrical Engineering)

Gumede, Wandile Sibaphiwe Thido (Electrical Engineering)

Hleko, Gift Sekhumbuzo (Electrical Engineering)

Hlongwane, Vukona Leona (Electrical Engineering)

Holoza, Siphesihle (Electrical Engineering)

Jambo, Chido Takudzwa (Electrical Engineering) **(with distinction)**

Kutu, Simalo Sylvester (Electrical Engineering)

Letseka, Thibello Walter (Electrical Engineering)

Litabe, Pudumo Zacharia (Electrical Engineering)

Mabe, Tholane (Electrical Engineering)
Mabessa, Tumelo (Electrical Engineering)
Mabunda, Innocent (Electrical Engineering)
Magano, Lebogang David (Electrical Engineering)
Magombo, Deusi (Electrical Engineering)
Makanya, Thulani (Electrical Engineering)
Makhado, Emma (Electrical Engineering)
Makhanya, Motlalepula (Electrical Engineering)
Malatji, Advocate Thabang (Electrical Engineering)
Malatsi, Masedi (Electrical Engineering) **(with distinction)**
Malete, Kgothatso Jack (Electrical Engineering)
Maluka, Tumiso Vanessa (Electrical Engineering)
Mangadi, Monica Florence (Electrical Engineering)
Manyama, Lethabo (Electrical Engineering)
Masango, Kwanda Senzo (Electrical Engineering)
Mashatane, Rose (Electrical Engineering)
Mashau, Khumbelo Queen (Electrical Engineering)
Matshaya, Gerald Sibusiso (Electrical Engineering)
Mavimbela, Nduduzo Wandile (Electrical Engineering)
Mbeche, Jerome Philip (Electrical Engineering)
Mbedzi, Eugene (Electrical Engineering)
Mdunyelwa, Onezwa (Electrical Engineering)
Mkansi, Thapelo (Electrical Engineering)
Mkhantshwa, Pride (Electrical Engineering)
Mlaba, Wandile (Electrical Engineering)
Mokobodi, Tebatso Chuene (Electrical Engineering)
Moloi, Moratuwa Portia (Electrical Engineering)
Moreku, Losbey Elfes (Electrical Engineering)
Moripe, Neo (Electrical Engineering)
Motebejane, Bohlale Nicholas (Electrical Engineering)

Moyo, Edmund Nhlanhla (Electrical Engineering)
Mputla, Lesiba Alpheus (Electrical Engineering)
Mzomba, Abongile (Electrical Engineering)
Ndeya, Phumelela (Electrical Engineering)
Ngobeni, Tshepo (Electrical Engineering)
Ngomane, Bongumusa (Electrical Engineering)
Ngwenya, Siyabonga Tim (Electrical Engineering)
Nkuna, Phalalani Ednes (Electrical Engineering)
Nkwahla, Zuko (Electrical Engineering)
Ntantiso, Mkhanyiseli (Electrical Engineering)
Nyathi, Deans David (Electrical Engineering)
Odia, Mwangi Deborah (Electrical Engineering)
Pebane, Retselisitsoe David (Electrical Engineering)
Phiri, Levy Tisetso (Electrical Engineering)
Phoswa, Mthobisi (Electrical Engineering)
Ramalepe, Noko (Electrical Engineering)
Ramaru, Tshamano (Electrical Engineering)
Sambo, Suzan (Electrical Engineering)
Shibodzi, Tiyiselani (Electrical Engineering)
Silebethu, Simthembele (Electrical Engineering)
Simango, Khudani (Electrical Engineering)
Sithole, Christopher (Electrical Engineering)
Skhosana, Thabang (Electrical Engineering)
Themba, Shammirah Nomfundo (Electrical Engineering)
Tjatji, Mphele Mamahupe (Electrical Engineering)
Ubisi, Keagile (Electrical Engineering)
Wistebaar, Tokollo Paul Eddie (Electrical Engineering)
Wookey, Tanweer (Electrical Engineering)
Xulu, Andile (Electrical Engineering)

3. Bachelor of Engineering

Daniels, Myles Llewellyn (Electrical and Electronic with Information Technology)

Dunga, Sinovuyo (Electrical and Electronic)

Kanku, Muteba (Electrical and Electronic)

Komana, Tshephang (Electrical and Electronic)

Lukumbi, Abri Monga (Electrical and Electronic) **(with distinction)**

Mahlare, Crossborn Kadishi (Electrical and Electronic)

Makhubo, Anele (Electrical and Electronic)

Makhura, Kgaugelo Fannie (Electrical and Electronic)

Matshika, Ntokozo (Electrical and Electronic)

Mbatha, Lindani (Electrical and Electronic)

Miya, Tlotlisang (Electrical and Electronic)

Mogoru, Maganyeke Thabiso (Electrical and Electronic)

Mohlala, Nthule Ignecious (Electrical and Electronic)

Moji, Thato Regina (Electrical and Electronic)

Monnanyane, Amogelang (Electrical and Electronic)

Mudau, Khathuthshelo Desire (Electrical and Electronic)

Mukwevho, Gudani Austin (Electrical and Electronic)

Mulaudzi, Gracious Rofhiwa (Electrical and Electronic with Information Technology)

Napolo, Kelvin Tiferanduna (Electrical and Electronic)

Ndlovu, Sinokuthaba Mellisa (Electrical and Electronic)

Nkosi, Philani Buhlebenkosi Nhlakanipho (Electrical and Electronic)

Ntai, Lerato Innocent (Electrical and Electronic)

Ntlhane, Tebogo Kadi (Electrical and Electronic)

Patel, Vidhi (Electrical and Electronic)

Seforo, Tshiamo Bubi (Electrical and Electronic)
Serope, Thapelo Michael (Electrical and Electronic)
Shaba, Owen (Electrical and Electronic)
Skosana, Joseph (Electrical and Electronic)
Slabbert, Craig Daniel (Electrical and Electronic) **(with distinction)**
Thwala, Zekhethelo Mkhosomuhle (Electrical and Electronic)
Timoteus, Timoteus Iiyambo (Electrical and Electronic)
Zwane, Nomfaneleko Hope (Electrical and Electronic)

4. Bachelor of Science Honours

Bekanjani, Inganathi (Construction Health and Safety Management)
Chauke, Elia (Quantity Surveying)
Chauke, Nyiko Nathanael (Quantity Surveying)
Colyn, Tshepo (Quantity Surveying)
Dhladhla, Siphilwe Martin (Quantity Surveying)
Diphoko, Mahlomola Ben (Construction Management)
Dube, Patricia Siphilwe (Construction Project Management)
Hlongwane, Katlego Muriel (Construction Management)
Kapa, Masilo Jimmy (Construction Project Management)
Kekana, Mabatho Joan (Construction Management)
Kgomo, Tlou Caroline (Quantity Surveying)
Khambule, Sibusiso (Quantity Surveying)
Kubeka, Andile (Quantity Surveying)
Kubjana, Mapula Lucy (Quantity Surveying)
Lebeya, Keletso (Quantity Surveying)
Leshabane, Kemishetjo Lizelle (Construction Management)

Madlala, Njabulo (Quantity Surveying)
Madubanya, Mosupo (Construction Project Management)
Madutung, Marumo Raymond (Construction Project Management)
Magudulela, Anele (Construction Project Management)
Mahamba, Thulisile Amanda (Quantity Surveying)
Mahlangu, Zanele (Quantity Surveying)
Mahlaule, Nthabiseng (Quantity Surveying)
Majakajaka, Lwazi (Quantity Surveying)
Makalima, Unathi (Quantity Surveying)
Makgoka, Basetsana Matlou (Quantity Surveying)
Mametja, Tumelo (Quantity Surveying)
Manana, Nomhle Millicent (Construction Management)
Manganyi, Vumboni Fortunate (Construction Project Management)
Maphanga, Trevor Josias (Construction Management)
Masasane, Mabetlela Jan (Construction Management)
Mathonsi, Mikateko Tinny (Construction Project Management)
Matthews, Joshua Gerald (Construction Management)
Mavunda, Shane (Quantity Surveying)
Mhlanga, Ntshovelo Sydney (Construction Management)
Mhlarhi, Ndzalama Clairvius (Construction Project Management)
Mngambi, Viwe Anda Ntombikayise (Construction Health and Safety Management)
Modula, Thabang Hanuel (Construction Management)
Mogane, Joyce Pheladi (Construction Health and Safety Management)
Mohlakoana, Lerato Masechaba Zanda (Quantity Surveying)

Mohlasedi, Zinhle Permanent (Construction Health and Safety Management)

Mokonyane, Lerato Precious (Construction Health and Safety Management)

Motingwe, Thatoyaone Oneil (Construction Project Management)

Mpika, Thandolethu Linhle (Construction Project Management)

Mthethwa, Bayanda (Construction Project Management)

Mthimkhulu, Thembene Innocentia (Quantity Surveying)

Mudau, Dzivhuluwani Lilian (Quantity Surveying)

Ndlovu, Bridget Nelly (Construction Project Management)

Ndlovu, Tanyah Musengi (Quantity Surveying)

Ndwandwe, Melusi Wiseman (Construction Management)

Ngcobo, Nhlanhla Trevor (Quantity Surveying)

Ngobeni, Hlayisani (Construction Health and Safety Management)

Nhantumbo, Nikiwe Felesmina (Construction Project Management)

Nkuna, Good (Construction Management)

Ntuli, Nonhlakanipho Nomaphemba (Construction Management)

Phandle, Hope Vuyo (Construction Project Management)

Pheza, Nwabisa Precious (Construction Project Management)

Phiri, Ngobeni David (Quantity Surveying)

Phoshoko, Sello (Quantity Surveying)

Ramotshela, Mantoa (Construction Management)

Ravele, Muvhulawa (Quantity Surveying)

Tekwane, Sibongile Grace (Quantity Surveying)

Thabethe, Mthunzi Simon (Construction Health and Safety Management)

Tigere, Kundai Matthew (Quantity Surveying)

Ubisse, Zanele Buhle (Construction Management)

Xhakaza, Makhosazane (Construction Management)

Yeko, Yamkela (Construction Management)

Zitha, Aser (Construction Management)

5. Bachelor of Engineering Technology Honours

Abdlahi, Abdul Asis (Electrical Engineering)

Baloyi, Rojero (Electrical Engineering)

Bele, Beauty Paballo (Electrical Engineering)

Chawanda, Simba Tatenda (Electrical Engineering)

Chisedzi, Lloyd Prosper (Electrical Engineering)

Ditshego, Bojane (Electrical Engineering)

Mabuza, Promise Pertain (Electrical Engineering)

Machaza, Mandlenkosi (Electrical Engineering)

Maifala, Kamogelo (Electrical Engineering)

Makhubela, Tshepo Wiseman (Electrical Engineering)

Maluleke, Bethuel Dzunisani (Electrical Engineering)

Manda, Benson (Electrical Engineering)

Mangwenyane, Itemogeng Soldan (Electrical Engineering)

Matekenya, Nash (Electrical Engineering)

Mjekula, Ayabonga (Electrical Engineering)

Motheane, Kgotso Frank (Electrical Engineering)

Msomi, Nkululeko Lumka Zandisile (Electrical Engineering)

Mudau, Muneiwa Sanna Mavhungu (Electrical Engineering)

Ndou, Anita (Electrical Engineering)

Nkambule, Banelisi (Electrical Engineering)
Nyoni, Samuel Anesu (Electrical Engineering) (**with distinction**)
Phala, Keorapetse Kgopotso (Electrical Engineering)
Schoombie, Brydon (Electrical Engineering)
Seipei, Refilwe Elaine (Electrical Engineering)
Sobhuza, Zubenathi Innocent (Electrical Engineering)
Tugwete, Nigel (Electrical Engineering)
Zitha, Pamela (Electrical Engineering)

6. Master of Technology

Ilunga, Ngulungu (Electrical Engineering)
Dissertation: Comparative Study on Traditional Learning methods' performance in Big Data Analysis
Supervisors: Prof BS Paul
Co-supervisor/s: Prof W Doorsamy

Maeko, Mpho Glen (Electrical Engineering)
Dissertation: Analysis of a fault-tolerant nine-phase induction motor drive
Supervisors: Dr M Muteba
Co-supervisor/s:

Nkosi, Thalente Lungile (Construction Management)
Dissertation: Harnessing the fourth industrial revolution for improved educational infrastructure in South African higher institutions
Supervisors: Prof CO Aigbavboa

Co-supervisor/s: Prof NN Mashwama & Prof WD Thwala
Rammala, Ngwanatladi Marcia (Construction Management)

Dissertation: The adequacy of the current method of valuation used by the municipalities for tenement rating to reduce objections and increase revenue to the government

Supervisors: Prof CO Aigbavboa

Co-supervisor/s: Dr P Akinbogun

Thwala, Gab'sile Hlengiwe (Quantity Surveying)

Dissertation: Assessment of health and safety management practices Eswatini.

Supervisors: Prof CO Aigbavboa

Co-supervisor/s: Prof WD Thwala & Dr D Aghimien

7. Master of Science

Lesailane, Mmadikgole Portia (Construction Management)

Dissertation: An assessment of the contracting systems in the South Africa construction industry

Supervisors: Prof CO Aigbavboa

Co-supervisor/s: Prof WD Thwala

Masoetsa, Tshweu Given (Construction Management) **(with distinction)**

Dissertation: An assessment of construction constraints on project performance in South Africa

Supervisors: Prof CO Aigbavboa

Co-supervisor/s: Prof B Awuzie & Dr O Ogunbayo

Msiska, Ulunji Mavumbanya (Construction Management) (with distinction)

Dissertation: Effect of variation order on construction projects performance: Value adding or waste-a-stakeholders perspective

Supervisors: Prof WD Thwala

Co-supervisor/s: Dr XN Mashwama

Ramohlokoane, Mosa Mpho (Construction Management)

Dissertation: An appraisal of project management competencies for embedding sustainability ethos across the lifecycle of construction projects

Supervisors: Prof BO Awuzie

Co-supervisor/s: Prof CO Aigbavboa

8. Master of Philosophy

Lesele, Msizi Brian (Electrical & Electronic Engineering) (with distinction)

Dissertation: Design of a smart air and water quality monitoring system

Supervisors: Prof W Doorsamy

Co-supervisor/s: Prof BS Paul

Moremi, Lethabo Elias (Electrical & Electronic Engineering)

Dissertation: Investigating real estate opportunities in The South African market using machine learning

Supervisors: Prof BS Paul

Co-supervisor/s: Prof W Doorsamy

9. Master of Engineering

Adegoke, Samson Ademola (Electrical and Electronic Engineering) **(with distinction)**

Dissertation: Power systems optimization approaches to mitigate voltage instability issues

Supervisors: Prof Y Sun

Adeleke, Ismail Adeniyi (Electrical and Electronic Engineering) **(with distinction)**

Dissertation: A hybrid machine learning and embedded Internet of Things based water quality monitoring system

Supervisors: Prof N Nwulu

Co-supervisor/s: Dr OO Ogbolumani

Chakoma, Shingirirai Michael (Electrical and Electronic Engineering)

Dissertation: Design and implementation of an advance beamforming wireless radio frequency transceiver in the millimetre wavelength range

Supervisors: Prof KA Ogudo

De Villiers, Byron Louis (Electrical and Electronic Engineering)

Dissertation: Advancing deep reinforcement learning for vision-based autonomous vehicle control

Supervisors: Dr DG Sabatta

Grobler, Joost Heystek (Electrical and Electronic Engineering)

Dissertation: FPGA based radiometer with four spectral windows

Supervisors: Prof TG Swart

Co-supervisor/s: Dr SP Van den Heever

Manish, Matri Manish (Micro-And Nanoelectronic Engineering)

Dissertation: Internet of Things based smart management system for water 4.0

Supervisors: Prof G Swart

Co-supervisor/s: Dr P Thakur

Mape, Wandile Ashley (Micro-and Nanoelectronic Engineering)

Dissertation: Design and application of nanosensors for visible spectrum detection

Supervisors: Prof G Singh

Co-supervisor/s: Dr P Thakur

Mishra, Saket (Micro-and Nanoelectronic Engineering) (**with distinction**)

Dissertation: Diffusive molecular communication over impairments under different deployments

Supervisors: Prof G Singh

Co-supervisor/s: Dr SP Singh

Mudau, Tshimangadzo Crestinah (Electrical and Electronic Engineering)

Dissertation: Filters for latent fingerprint images lifted using optical coherence tomography

Supervisors: Prof K Ouahada

Co-supervisor/s: Mr R Khutlang

Nkuna, Matimu Caswell (Electrical and Electronic Engineering)

Dissertation: Investigating image steganography techniques to preserve artificial neural network effectiveness

Supervisors: Prof R Heymann

Co-supervisor/s: Dr E Esenogho

Nkutwa, Lubo (Micro-and Nanoelectronic Engineering)

Dissertation: Internet of Things hardware and software development into a single agile project

Supervisors: Prof G Singh

Co-supervisor/s: Dr T Thakur

Setlhapelo, Olorato Precious (Micro-and Nanoelectronic Engineering)

Dissertation: MIMO technology for hybrid PLC-VLC communication channels

Supervisors: Prof K Ouahada

Co-supervisor/s: Dr T Thakur

Sithole, Sabelo Emmanuel (Micro- and Nanoelectronic Engineering) **(with distinction)**

Dissertation: Improvement of transport layer protocol congestion control mechanism in body area networks: A Terahertz frequency application

Supervisors: Prof G Singh

Co-supervisor/s: Dr T Thakur

Solilo, Mcebisi Nelson (Electrical and Electronic Engineering)

Dissertation: Development of an unmanned aerial vehicle for tracking overhead power lines

Supervisors: Prof BS Paul

Co-supervisor/s: Prof W Doorsamy

10. Doctor Philosophiae (DPhil)

Museba, Tinofirei (Electrical and Electronic Engineering)

Thesis: *Adaptive machine learning algorithms for streaming data associated with concept drift*

Supervisor: Prof FV Nelwamondo

Co-supervisor: Prof K Ouahada

11. Doctor of Philosophy (PhD)

Babalola, Ifedolapo Helen (Construction Management)

Thesis: *A human resource management practice model for the Nigeria*

construction industry

Supervisor: Prof CO Aigbavboa

Co-supervisor: Prof WD Thwala

Olukanmi, Seun Olayemi (Electrical and Electronic Engineering)

Thesis: Artificial intelligence-based influenza forecasting using Google search data: A South African case study

Supervisors: Prof FV Nelwamondo

Co-supervisor/s: Prof N Nwulu

Museba, Tinofirei DPhil (Electrical and Electronic Engineering)

Tinofirei Museba obtained his Bachelor of Science degree in Mathematics and Computer Science from the University of Enrique Jose Varona, Havana, Cuba, in 1996, and a Master's degree in Computer Science from the National University of Science and Technology (NUST), Bulawayo, Zimbabwe, in 2003. His research interests include data stream mining, ensembles of learning machines, concept drift and pattern recognition. He is a member of professional organisations, which include the Institute of Information Technology Professionals South Africa (IITPSA) and the South African Institute of Computer Scientists and Information Technologists (SAICSIT).

The candidate's doctoral research focused on the derivation of adaptive machine learning algorithms by exploiting the diversity-margin connection, previously learned knowledge and ensemble heterogeneity to handle different types of concept drift in dynamic environments. The research investigations revealed that the combination of different machine learning algorithms to introduce diversity, exploiting the margin- diversity connection and exploiting historically learned models provides stability to the learning model and improves the generalisation performance of the learning model in dynamic environments associated with different types of drifting concepts. Thus, the candidate developed several novel learning models capable of adapting to different types of concept drifts for classification problems in dynamic environments. This doctoral thesis produced three journal publications and two conference proceedings.

Supervisor: Prof FV Nelwamondo

Co-supervisor: Prof K Ouahada

Babalola, Ifedolapo Helen PhD (Construction Management)

Ifedolapo Helen Babalola has been an academic and a researcher at the Department of Project Management Technology, Federal University of Technology Akure (FUTA), Nigeria, since 2015. She obtained a Bachelor of Engineering degree in Civil Engineering (2004) and a Master of Engineering in Construction Engineering (2014), both from FUTA, Nigeria. She worked as an assistant resident engineer in Nigeria for over a year before joining academia. These degrees and professional experiences prepared her practically and theoretically for her journey towards a doctorate in construction management. She enrolled for her doctoral studies at the University of Johannesburg, South Africa, in 2020. Based on her doctoral studies, the candidate has published one article in a journal, two peer-reviewed conference articles, and two manuscripts for journals that are currently being reviewed.

The candidate's doctoral thesis developed a human resource management practice (HRMP) model for the Nigerian construction industry. The candidate employed structural equation modelling (SEM) with the use of EQations (EQS) Version 6.4 software in the analysis of the primary data. The results were further validated using confirmatory factor analysis (CFA). The findings revealed that the identified seven latent constructs of HRMPs – Training and Development (TND), Performance Appraisal (PAP), Recruitment and Selection (RNS), Rewards (RWDS), Communication (COM), Emotional Intelligence (EI), and Technological Innovation (TI) – exhibited a positive effect in influencing HRMP implementation in the Nigerian construction industry. The overall contribution of the study is the identification of the significant factors and the development of a model for enhanced performance and productivity of human resources management in the Nigerian construction industry. Furthermore, the findings serve as a platform for the advancement of research in human resource management in the construction industry.

Supervisor: Prof CO Aigbavboa

Co-supervisor: Prof WD Thwala

Olukanmi, Seun Olayemi PhD (Electrical and Electronic Engineering)

Seun Olukanmi holds an Honours degree in Computer Science from the Ladoke Akintola University of Technology, and a Master's degree in Computer Science from the University of Lagos. She completed both degrees with distinction. She then completed another Master's degree (by Research) in Computer Science at the University of KwaZulu-Natal, finishing in a record time of two semesters. She registered for doctoral studies at the Institute for Intelligent Systems, in the Department of Electrical and Electronics Engineering at the University of Johannesburg.

The candidate's research focused on artificial intelligence (AI) application in public health. The thesis developed AI-based systems for influenza monitoring and forecasting in South Africa using people's patterns of search for flu-related terms on Google. The study established the usefulness of Google search data as a faster, cheaper and complementary alternative for forecasting influenza infection rates in the country, when compared to the traditional approach of relying on data from general practitioners. This approach aids better preparedness and planning of interventions and the appropriate allocation of public health resources by the government and public health authorities, ultimately reducing morbidity and mortality due to the influenza pandemic. Such studies are scarce in Africa and no published study has been found for South Africa. Three publications were produced from the work.

Supervisor: Prof FV Nelwamondo

Co-supervisor: Prof NI Nwulu



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National Anthem of South Africa

Nkosi sikelel' Afrika
Maluphakanyisw' uphondo lwayo,

Yizwa imithandazo yethu,
Nkosi sikelela, thina lusapho lwayo.

Morena boloka setjhaba sa heso,
O fedise dintwa le matshwenyeho,
O se boloke, O se boloke setjhaba sa heso,
Setjhaba sa South Afrika - South Afrika.

Uit die blou van onse hemel,
Uit die diepte van ons see,
Oor ons ewige gebergtes,
Waar die kranse antwoord gee,

Sounds the call to come together,
And united we shall stand,
Let us live and strive for freedom,
In South Africa our land.