

## **FACULTY OF ENGINEERING, THE BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY**

### **HIGHER CERTIFICATE IN INFORMATION TECHNOLOGY IN USER SUPPORT SERVICES**

ADAMS, Raveal Kimberleigh Carolina  
BAKUBAKU, Odwa  
BANGELA, Akhona  
BANTOM, Juan-Lee Ashaan Granwell  
BATI, Azola  
BAVUMA, Zintle Ntandokazi  
BAXA, Luvuyo  
BLOK, Duwayne  
BOLTINA, Unam  
CHAGI, Vuyolwethu  
DAVIDS, Moegamat Yaseen  
FELIX, Rhys  
GOLIATH, Keshell Anushca  
GQAMANE, Siziphiwe  
GQOLA, Sandisiwe  
GUBELA, Lifalekaya  
GWAYI, Bongeka Samkelisiwe  
HEKA, Mandilakhe  
HLABANA, Ayandiswa  
JONAS, Lutho  
JOZI, Tuleleni  
KAMTE, Simtembile  
KANDIWA, Tinotenda  
KHONZA, Siphosihle  
KOK, Confidence Letlele  
KUZE, Mzoli Amos  
LUBEDU, Anelitha  
LUZIPHO, Sinazo  
MADIKANE, Bongumsa Rowan  
MADIKIZELA, Dineo  
MADLEBE, Esethu  
MAGADLA, Athini Siyakubonga  
MALGAS, Liyabona  
MALUNGA, Buhle  
MANI, Ayabongwa  
MANKANKU, Avela  
MAPEMPENI, Sihle  
MBATSHA, Siviwe Khanya  
MBIYO, Bomikazi  
MBOYA, Faith  
MDUBEKI, Wandile  
METULI, Siso  
MGQOLOZANA, Sinomtha  
MGQUBA, Ongeziwe  
MIMI, Thulani  
MKONTO, Anganathi  
MLALA, Masimbonge  
MLONZI, Veliswa Petronella  
MOHABENI, Luxolo  
MOODALEY, Brandon Kevin  
MOOPELWA, Kopano  
MPINI, Esethu  
MPUTAMPUTA, Simamkele  
MTAMZELI, Inga  
MTHI, Aluncedo  
MTWA, Sihle  
MWANGONDA, Mwiza Warren  
MZANYWA, Sinovuyo  
MZWALI, Lihle  
NDZUTA, Olwethu  
NEWTON, Luke Josh  
NGCANGCA, Chwayitho Chulumanco  
NGCUKANA, Sanela  
NGCWEMBE, Azile  
NGODWANA, Siyathemba  
NGQUSEKA, Lisanele  
NGWANA, Anathi  
NJIVA, Siphe  
NKALA, Sibulele  
NOBUNXA, Zikho  
NOGANDA, Lolwethu  
NOMPUMZA, Sinazo  
NONDALA, Cwangco  
NONXUBA, Ayabonga

NTANTISO, Luvuyo  
NTLEKI, Amzile  
NTSETA, Nosibusiso  
NWANKOTI, Mikateko Shon  
PAKELA, Fatima  
PHENDUKA, Odwa  
PRINS, Kimberley Marilyn  
QWEBI, Khanyisa  
RALANE, Sonwabile Luzuko  
SIBISI, Kwanele  
SIGWADI, Viwe  
SIJAJI, Asenele  
SIMONS, Bradley Luciano Nataniël  
SOCOSA, Biyela  
TELA, Mvuzo  
TENENE, Awenkosi Sicelo  
TETO, Nosango  
TOM, Pelisa  
TSHAZI, Andiswa  
WILI, Wandisile  
XAMNTWANA, Asaphelele  
YIBE, Sinethemba  
ZWANE, Tumelo Brian

### **CUM LAUDE**

DE VASCONCELLOS, Ervine Ernest  
HLANEKELA, Vuyolwethu  
KRALO, Asemahle  
LUKOJI, Mariam Tshabutula  
MABASO, Ntombizonke Favourite  
MKHIZE, Lungisane  
NJIKELANA, Lutholwamazizi Pearl  
REDLINGHUYS, Anastacia  
SHEMI, Elvin  
WECU, Anathi  
YUSUFF, Jamal Bolaji

### **NATIONAL DIPLOMA: INFORMATION TECHNOLOGY**

ADAMS, Khwezi Theophilus	(Software Development)
ARENDS, Lauren Amber	(Support Services)
ARMOED, Jesmaine Muriel	(Software Development)
AUSTIN-DAY, Jayson David	(Software Development)
AZEM, Nadia	(Software Development)
BAILEY, Jason Jermaine	(Software Development)
BAILEY, Matthew John	(Support Services)
BANCA, Milani	(Software Development)
BELSTEAD, Jarrod Anthony	(Software Development)
BENTSILE, Lwazi	(Support Services)
BHALA, Nomhle	(Software Development)
BLOU, Jassen	(Support Services)
BOOI, Thandile	(Software Development)
BRANDT, Aidan Harry	(Communication Networks)
BUHE, Sive	(Software Development)
BUXEKA, Leletu	(Support Services)
BURJINS, Craig Etienne	(Software Development)
CAGA, Mwongi	(Support Services)
CAMPHER, Ed Michael Curwinn	(Software Development)
CONRADIE, Robbert James	(Software Development)
CWATHI, Abenathi	(Software Development)
DANSTER, Siyamthanda	(Software Development)
DAWOOD, Bryan Mark	(Communication Networks)
DE VRIES, Tristan Douglas	(Software Development)
DLABOM, Khuthala	(Software Development)
DLEMBULA, Nonophela	(Communication Networks)
DU PLOOY, Michael James	(Software Development)
DUMA, Siboniso	(Communication Networks)
DYASI, Siviwe Palesa	(Software Development)
FILLIS, Melvyne Nazmy	(Software Development)
GANISO, Ntombekhaya Mirriam	(Communication Networks)
GANTSHO, Chuma	(Software Development)
GCEYA, Aviwe	(Software Development)
GEORGE, Tatenda	(Software Development)
GWAGWA, Yanga	(Software Development)
GWEGWE, Lukhona	(Software Development)
HASSAN NOOR, Fatima	(Software Development)
HERMANUS, Lumko	(Communication Networks)
HEUER, Tonne	(Software Development)
JACKLENS, Zanele	(Support Services)

JACOBS, Peter Charles	(Software Development)
JAM-JAM, Manelisi	(Software Development)
JILILI, Sive	(Support Services)
JORDAAN, Jody Jarod	(Support Services)
KABANE, Victor Mzimasi	(Software Development)
KAPLEN, Michael Kalil	(Software Development)
KEKE, Sibulelo	(Communication Networks)
KERRIDGE, Mogammad Shafi	(Software Development)
KISTEN, Keanu Dylan	(Software Development)
KOBA, Sivuyile	(Software Development)
KOLOKI, Dumisani	(Software Development)
KUMALO, Mzuwgama Precious	(Support Services)
KUMBACA, Asonge Kamva	(Communication Networks)
LANGSON, Matthew Keith	(Software Development)
LINDLEY, Cameron Lee	(Software Development)
LLOYD, Thristan Shannon	(Communication Networks)
LUZIPO, Khanyiso	(Software Development)
MABALA, Siyasamkela	(Software Development)
MABANGULA, Sanele	(Software Development)
MABYANA, Itumeleng	(Software Development)
MADIKIZELA, Asanda	(Software Development)
MADUBELA, Simphiwe	(Software Development)
MAGANYA, Kgotsotalang	(Software Development)
MAHASHA, Keith Karabo	(Software Development)
MAHLAHLA, Athenkosi	(Software Development)
MAJIBA, Andile	(Software Development)
MAJIKIJELA, Ezile	(Software Development)
MAKHUBALO, Tshegofatso Blessing	(Communication Networks)
MAKISI, Asekhona Innocent	(Software Development)
MAKUPULA, Afikile Mzwamandla Sindiso	(Support Services)
MANELI, Mfundo Andrew	(Software Development)
MANGCU, Viwe	(Software Development)
MARAI, Stefan Jannie	(Software Development)
MASINYANE, Nontuthuzelo Mavis	(Software Development)
MASWANA, Siphumelele	(Software Development)
MATHANGANA, Nikitha Lilitha	(Software Development)
MATROKO, Sanelisiwe	(Support Services)
MAYOLI, Pamela	(Support Services)
MBANZI, Sinovuyo	(Communication Networks)
MBOBO, Inga Odwa	(Communication Networks)
MBOKOTHO, Vuyisa	(Software Development)
MDAKANE, Nkosephayo Boufo	(Software Development)
MDLIVA, Kholosa Unathi	(Software Development)
MFINI, Masonwabe	(Support Services)
MKOSI, Alungile Gladysia	(Software Development)
MNYAMANA, Okuhle Zimasa	(Software Development)
MODIKWE, Dalekile Bohlale	(Software Development)
MOLAPO, Maafane Boitumelo Brenden	(Software Development)
MOLEFE, Bafana Christophar	(Communication Networks)
MONA, Phelela	(Support Services)
MOODALEY, Reeze Peter	(Software Development)
MOSS, Trudy Renica	(Support Services)
MPHETSHETHWA, Khaya	(Software Development)
MSIKINYA, Daluxolo	(Software Development)
MSUTWANA, Nhlakanipho	(Software Development)
MTIMKA, Xolisa Leo	(Support Services)
MTIMKHULU, Mthokozisi Rupert	(Software Development)
MTSHIZANA, Chulumanco Lithambile Cedric	(Software Development)
MUNZHEDZI, Gundo	(Communication Networks)
NAIDOO, Rashaylin	(Software Development)
NCEDE, Sinothando	(Software Development)
NDABA, Nkosoxolo	(Software Development)
NDABA, Nomalungelo Ntombizodwa	(Support Services)
NDAMASE, Jonguxolo	(Support Services)
NDEVU, Lulutho	(Support Services)
NDLOVU, Ntuthuko Fanini	(Software Development)
NDLOVU, Sandile Reon	(Software Development)
NDONGENI, Pumelela Matthew	(Support Services)
NGAM, Asisipho Patiance	(Software Development)
NGCOBO, Sabelo Boys	(Communication Networks)
NGCOBO, Simangele	(Support Services)
NGOLOMI, Sinovuyo	(Software Development)
NGQEKEZA, Khanya Nangamso	(Software Development)
NJALO, Hlengiwe Faith	(Communication Networks)
NOPOTE, Lusanda	(Software Development)
NTLALI, Aphiwe	(Support Services)
NTSABO, Lwando	(Support Services)
NTSHOFU, Thobeka	(Communication Networks)
NTULI, Sipehelele Nkululeko	(Software Development)

NTWANAMBI, Yolanda	(Support Services)
NUKERI, Keith Thabang	(Software Development)
NYATHI, Siphosethu	(Software Development)
NYAWO, Comfort Mduduzi	(Software Development)
OWUSU-ANSAH, Paa Kwesi Assan	(Software Development)
PATEL, Fazila	(Support Services)
PHENYA, Simamkele	(Software Development)
PIO, Abre Reinier	(Software Development)
QOBONGO, Mninawa Curtis	(Software Development)
RALIQALA, Topollo	(Software Development)
SAQHUDE, Luyanda	(Support Services)
SEFALAFALA, Dumisane Adolf	(Support Services)
SMITH, Hein	(Software Development)
SMITH, Wayden Emilio	(Software Development)
SOLOMON, Xolela Serzaria	(Software Development)
SONTO, Luxolo	(Software Development)
STANDER, Cornelius Johannes	(Software Development)
STELEKI, Khanya	(Software Development)
TSHIKORORO, Dali Lutendo	(Communication Networks)
TSHINGANA, Xolelwa	(Software Development)
TUBE, Zandile	(Software Development)
TUKELA, Baphiwe	(Software Development)
TUTU, Entle Sipiwe	(Software Development)
TWANI, Jacob Cebisa	(Software Development)
VALTYN, Ernest	(Software Development)
VAN ROOYEN, Dewet	(Software Development)
VOGEL, Estian	(Software Development)
VUMAZONKE, Avela	(Communication Networks)
VUSANI, Bonginkosi	(Software Development)
WANTU, Yandiswa	(Software Development)
WATERS, Nathan Daniel	(Support Services)
WILLIAMS, Rebecca Hannah Margot	(Software Development)
WINTER, Keano Franz	(Software Development)
YALEZO, Lwandile	(Support Services)
YOLI, Siyabonga Xhanti	(Support Services)
ZONKE, Thanduxolo	(Software Development)
ZWENI, Phakamisa Morgan	(Support Services)

#### CUM LAUDE

CEBEKHULU, Senele	(Software Development)
CHARLIE, Buseka	(Software Development)
FOUCHE, Brandon	(Software Development)
GROBBELAAR, Frank Glynne	(Software Development)
HAGE, Francis Peter	(Software Development)
HEATH, Ashleigh Anna	(Software Development)
HUFKIE, Abigail Laverne	(Software Development)
MLUNGUZI, Lihle Harrison	(Software Development)
MULOVHEDZI, Confidence	(Communication Networks)
NYELENZI, Nwabisa	(Software Development)
PIENNAAR, Matthys Andreas	(Software Development)
SAUNDERS, Jessica Robyn	(Software Development)
TROLLIP, Dean Jonathan	(Software Development)
TSHIKOVHI, Ratshibvumo William	(Communication Networks)
WICOMB, Joshua Matthew	(Software Development)

#### BACHELOR OF TECHNOLOGY: INFORMATION TECHNOLOGY

ADAM, Riyaardh	(Software Development)
AFRIYIE, Lawrence Osei	(Software Development)
AMBARAM, Sanjay	(Communication Networks)
BABOO, Haanim	(Software Development)
BANETI, Siphosethu	(Software Development)
BHANA, Hishaan	(Communication Networks)
BHAT, Abdul Hadi	(Software Development)
BREAKFAST, Phakama	(Communication Networks)
BUSAKWE, Simphiwe	(Software Development)
CHANT, Thorne Trevor	(Software Development)
DE JAGER, Michael Johan	(Software Development)
DEKEDA, Nontyatyambo	(Software Development)
DINGA, Abulele	(Communication Networks)
DO REGO, Lauren Shirley	(Communication Networks)
DU PLESSIS, Wihan	(Software Development)
DU TOIT, Tiaan	(Software Development)
ESTERHUIZEN, Jacobus Johannes	(Software Development)
ESTERHUIZEN, Zadrion Wade	(Software Development)
EYBERS, Jason Henry	(Software Development)
FOURIE, Anri	(Software Development)
GARCES DE GOIS, Maurice	(Software Development)
GILES, Byron	(Communication Networks)

GOUWS, Marno Stefan *(Software Development)*

GROOTBOOM, Valjean Jonnathan Beredic

*(Communication Networks)*

HARRIS, Bryan Etienne

*(Software Development)*

JONAS, Warren Luke

*(Software Development)*

JUBHELA, Asavela

*(Software Development)*

JUMBA, Ayabonga Lufefe

*(Software Development)*

KANJANA, Siwaphiwe Ziphezihle

*(Software Development)*

KILI, Noloyiso

*(Communication Networks)*

LEUTLE, Mangilanyane Precious

*(Software Development)*

MALUSI, Bonisa Bobo Yanela

*(Communication Networks)*

MAQABANGQA, Sisikelelwe

*(Software Development)*

MAQOJANA, Mapasika Pascalina

*(Software Development)*

MAREE, Daniel Jacobus

*(Software Development)*

MATIKINCA, Mazizandile Given

*(Communication Networks)*

MATIWANE, Melikaya

*(Software Development)*

MAY, Hilgar Jean

*(Communication Networks)*

MAYO, Lonwabo

*(Communication Networks)*

MBESI, Iviwe

*(Communication Networks)*

MDUNYELWA, Siphosihle Vincent

*(Software Development)*

MGUQULWA, Zandile

*(Communication Networks)*

MNGEYIYANA, Thulani

*(Communication Networks)*

MOKGOSI, Rethabile

*(Software Development)*

MOKOENA, Tsebo

*(Software Development)*

MOLOSI, Unathi

*(Communication Networks)*

MUZAVAR, Aadil Anvarhusen

*(Software Development)*

NDLEBI, Likhaka

*(Software Development)*

NGCUKANA, Maliviwe Innocent

*(Communication Networks)*

NGWANE, Gqibokuhle Sisikelele

*(Communication Networks)*

NKONKOBÉ, Sibusiso

*(Software Development)*

NOGAYA, Chumani

*(Software Development)*

NORDIEN, Shakeel

*(Software Development)*

NTSHULANA, Uluthando Siyethemba

*(Communication Networks)*

PALACIOS RICARDI, Aquilina Karina

*(Communication Networks)*

POTBERG, Damon Anthony

*(Software Development)*

PUWANI, Linda

*(Communication Networks)*

ROBERTSON, Ashton Robin

*(Software Development)*

ROJI, Sbabalwe

*(Communication Networks)*

SIMANGO, Muzi Kendice

*(Software Development)*

SIQHAZA, Luvuyo

*(Software Development)*

SPEELMAN, Thandolwethu James Junior

*(Software Development)*

SURTIE, Lliandatno (Jnr) Denrick

*(Communication Networks)*

TANCU, Lusanda

*(Software Development)*

TONTSI, Bongiwe

*(Communication Networks)*

VAN HEERDEN, Gerado Miguel

*(Software Development)*

WEST, Keagan Derrick

*(Software Development)*

WIGGILL, Joshua David

*(Software Development)*

YOUNG, Courteney Taylor

*(Software Development)*

ZAHELA, Dumisani

*(Communication Networks)*

## **CUM LAUDE**

BROWNE, Christopher Mark

*(Software Development)*

DE AGRELLA, Carlo

*(Software Development)*

DOUWDIES, Shervin Romario

*(Software Development)*

FERREIRA, Mark

*(Software Development)*

FERREIRA, Waldo

*(Software Development)*

GATHERCOLE, Dale John

*(Software Development)*

JACOBSZ, Gerhardus Jacobus Christian

*(Software Development)*

JAPPIE, Uthmaan

*(Software Development)*

JEEWA, Akshay

*(Software Development)*

KRUGER, Madri

*(Software Development)*

MARAIS, Dylan

*(Software Development)*

MASUKO, Shawn Champion

*(Communication Networks)*

MATSHAYA, Anathi Roux Jr

*(Software Development)*

MATTOCKS, Aran

*(Software Development)*

MINNIE, Kayleigh Emmanuella

*(Software Development)*

MKHWANAZI, Dephney Thulisile

*(Software Development)*

MOLEKO, Mamello Katherine

*(Software Development)*

MULLER, Amber

*(Software Development)*

QAMATA, Sinobom Sibulele

*(Software Development)*

SALIE, Igshaan

*(Software Development)*

SLABBERT, Eugene

*(Communication Networks)*

SMITH, Ashleigh Robyn

*(Software Development)*

VAN NIEKERK, Craig Michael

*(Software Development)*

VAN ONSELEN, Darrel

*(Software Development)*

WESSELS, Justin

*(Software Development)*

WESTRAADT, Emile

*(Software Development)*

# **FACULTY OF ENGINEERING, THE BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY**

## **MASTER OF INFORMATION TECHNOLOGY**

BOTHA, Stephan

Title of thesis:

*FACTORS IMPACTING THE DESIGN OF A MOBILE APPLICATION FOR SOIL MANAGEMENT: A CASE STUDY OF THE EASTERN CAPE CROPS*

Supervisor: Prof D van Greunen

---

## **MASTER OF PHILOSOPHY IN INFORMATION TECHNOLOGY GOVERNANCE (COURSEWORK)**

LE ROUX, Wickus

Title of treatise:

*A FRAMEWORK TO GUIDE CYBERSECURITY GOVERNANCE EFFORTS IN NON-PROFIT ORGANISATIONS*

Supervisor: Prof D Pottas

---

SARPONG, George

Title of treatise:

*A STRATEGY FOR ADOPTING CLOUD COMPUTING SERVICES IN SMALL, MEDIUM AND MICRO ENTERPRISES (SME) IN NELSON MANDELA METROPOLE*

Supervisor: Mr D Joubert

Co-supervisor: Ms R Abrahams

---

## **DOCTOR OF PHILOSOPHY IN INFORMATION TECHNOLOGY**

SAIOD, Abdul Kader

Title of thesis:

*DATA QUALITY ISSUES IN ELECTRONIC HEALTH RECORDS FOR LARGE-SCALE DATABASES*

Supervisor: Prof D van Greunen

---

## **DOCTORAL CITATIONS**

# **THE DEGREE OF DOCTOR OF PHILOSOPHY IN INFORMATION TECHNOLOGY**

**ABDUL KADER SAIOD**

**Previous qualifications:**

2006 Bachelor of Computer Engineering  
2008 MSc Computer Systems and Network

Donetsk Technical University, Ukraine  
Donetsk Technical University, Ukraine

**Thesis:**

*DATA QUALITY ISSUES IN ELECTRONIC HEALTH RECORDS FOR LARGE SCALE DATABASES*

Data Quality (DQ) in Electronic Health Records (EHRs) is one of the core functions that play a decisive role to improve the healthcare service quality. The DQ issues in EHRs are a noticeable trend to improve the introduction of an adaptive framework for interoperability and standards in Large-Scale Database management systems. This study resulted in the design of a hybrid method based on Fuzzy-Ontology with performed mathematical simulations based on the Markov Chain Probability Model to address the raised DQ issues to interventions and to overcome barriers and challenges, including the provision of EHRs as it pertains to DQ.

Supervisor: Prof D van Greunen