

# Dr. Francois Mouton

## Curriculum Vitæ

716 Makou Street  
Monument Park  
Pretoria 0181  
South Africa

+27 (82) 857 5842

+27 (12) 664 0066

 moutonf

 moutonf@gmail.com

 www.social-engineer.co.za

## Education

- 2012  
2018  
**PhD Computer Science, University of Pretoria, Pretoria.**  
Social Engineering Attack Detection Model
- 2017  
**Programme in Project Management (Cum Laude), University of Pretoria, Pretoria.**  
Received the award as the top student for the programme
- 2009  
2012  
**MSc Computer Science (Cum Laude), University of Pretoria, Pretoria.**  
Additionally, completed all undergraduate Psychology and Research modules in preparation for PhD
- 2008  
**BSc Computer Science Honours, University of Pretoria, Pretoria.**
- 2008  
**IFIP-TC6 Summer School on Wireless Computing, University of Pretoria, Pretoria.**
- 2005  
2007  
**BSc Computer Science, University of Pretoria, Pretoria.**  
Additionally, completed all undergraduate Financial Accounting modules
- 2004  
**Senior Certificate (Distinction), High School Outeniqua, George.**
- 2004  
**A+ Technician Course (Distinction), Damelin, George.**

## PhD Thesis

- title *Social Engineering Attack Detection Model*
- supervisor Prof H. S. Venter
- description The contribution of this research is three iterations of the social engineering attack detection model, each improving on one another. The final iteration of the model allows an individual to alter their mental schema, whilst performing decision-making tasks, and thus allows a user to be more cognisant about their reasoning capability. Ultimately, this allows individuals to be more aware of social engineering attacks and allows these individuals to detect such attacks. As part of the research process, this research also contributed formal definitions for social engineering, a social engineering ontological model, ethical considerations regarding social engineering, a social engineering attack framework and social engineering attack examples for bidirectional communication, uni-directional communication and indirect communication.

---

## Master Thesis

title *Digital forensic readiness for wireless sensor network environments*  
supervisor Prof H. S. Venter  
description The contribution of this research is the digital forensic readiness prototype that can be used to add a digital forensics layer to any existing wireless sensor network. The prototype ensures the integrity and authenticity of each of the data packets captured from the wireless sensor network by using the number of nodes in the network that have seen the specific data packet. The prototype does not require any modification to be made on the existing wireless sensor network and is deployed as an additional wireless sensor network. One of the main problems in wireless sensor networks is flooding attacks. The prototype is able to detect flooding attacks and immediately alerts the user and pinpoints the origin of the flooding attack.

---

## Students Supervised

### MSc Students (by dissertation)

2019 **Ubaidullah Effendi**, *University of Western Cape*, Cape Town.

The spread patterns of Malware using USBs

### Honours Students (by mini-dissertation)

2018 **Samuel Abu**, *University of Western Cape*, Cape Town.

Snooping IoT Devices with Raspberry Pi

2018 **Ubaidullah Effendi**, *University of Western Cape*, Cape Town.

Free USBs with Malware

2016 **Gavin Wiener**, *University of Cape Town*, Cape Town.

MOVER Runner: Using Widely Available Smartphone Accelerometers to Detect Runner Falls

2016 **William Lumala**, *University of Cape Town*, Cape Town.

Visualisation of Accident Data in South Africa

2016 **Luke Bell**, *University of Cape Town*, Cape Town.

Mover: Car Collision Detection using Android

2016 **Saleem Manjoo**, *University of Cape Town*, Cape Town.

Aiding In The Creation of Social Engineering Attack Prevention Tools

2016 **Marcel Teixeira**, *University of Cape Town*, Cape Town.

Testing an Android Implementation of the Social Engineering Protection Training Tool

2016 **Michael Pepper**, *University of Cape Town*, Cape Town.

Social Engineering Prevention Training Tool: Testing a Web Implementation of the SEADMv2

2014 **Hendri Potgieter**, *University of Pretoria*, Pretoria.

Modelling Social Engineering Attacks

### Undergraduate Students (by final year project)

2015 **Unsolvable Solutions (Group of 5)**, *University of Pretoria*, Pretoria.

Eavesdropping Protection in Conclave

2013

**Just Development Technologies (Group of 3)**, *University of Pretoria*, Pretoria.  
Mobile On-board Vehicle Event Record

2012

**The Flying Lions Inc. (Group of 5)**, *University of Pretoria*, Pretoria.  
Mobile Expenditure Manager

2012

**Team Awesome Source (Group of 5)**, *University of Pretoria*, Pretoria.  
Secure Wireless Access Point

## Invited as External Examiner

2019

**School of Management, IT and Governance**, *University of KwaZulu-Natal*, Durban.

PhD Thesis: Information Security Standards and Policies Compliance by Nigerian Banks

2018

**School of Management, IT and Governance**, *University of KwaZulu-Natal*, Durban.

MSc Thesis: UKZN Westville students use of on-campus Wi-Fi and their perceptions of quality of service

2018

**School of Management, IT and Governance**, *University of KwaZulu-Natal*, Durban.

MSc Thesis: Cyber-Security and Governance for Industrial Control Systems in South Africa

2017

**School of Management, IT and Governance**, *University of KwaZulu-Natal*, Durban.

MSc Thesis: Cyber-security and Governance for Industrial Control Systems (ICS) in South Africa

2016

**Information Technology**, *Cape Peninsula University of Technology*, Cape Town.

MTech IT Thesis: Ant Colony Decision Forests for Intrusion Detection

2016

**School of Management, IT and Governance**, *University of KwaZulu-Natal*, Durban.

MSc Thesis: Cybersecurity Awareness (CSA) of Students at a Private Higher Education Institution in South Africa

2015  
2017

**School of Interactive Development**, *Open Window Institute for Arts and Digital Sciences*, Pretoria.

Examined final year portfolio's, based on technical ability, for completion of a BA degree in Visual Communication

## Invited as External Moderator

2016

**BTech Information Technology**, *Cape Peninsula University of Technology*, Cape Town.

Subject: Computer Security IV

## Workshops Presented

2019

**Cyber Security Honours Course**, *University of Western Cape*, Cape Town.

Presented a full day course to post graduate students on digital forensics, ethical hacking and social engineering.

2019

**Wits Certificate in Cybersecurity Professional Practice and Leadership**, *University of the Witwatersrand*, Johannesburg.

Invited to present the third module of this Cybersecurity certificate, which dealt with the topics of incident response, digital forensics and ethical hacking.

2017

**NCDevHack 2017**, *Northen Cape Hackathon*, Kimberley.

Invited to be a both a judge for the hackathon and to mentor the students.

2017

**ITWeb Security Conference, SS17Hack**, Midrand.

Invited to be a both a judge for the hackathon and to mentor the students.

2008  
2011

**Hands-on ethical hacking and software security**, *Information Security South Africa*, Johannesburg.

Presented annually

## Additional Training

2016

**Project Management Principles and Practices**, *University of Pretoria*, Pretoria.

Certification in Project Management

2015

**CISSP Training**, *Master Grade IT*, Cape Town.

Training course for the CISSP examination.

2014

**Technical Writing**, *CSIR Innovation Leadership And Learning Academy*, Pretoria.

Bussiness and Report Writing Skills.

2013

**Micro Expression Training Tool Advanced**, *Paul Ekman Group*, Online.

How to detect and identify micro expressions.

2012

**Social Engineering for Penetration Testers**, *Blackhat*, Las Vegas.

How to use Social Engineering in Penetration Testing.

2012

**Social Intelligence**, *CSIR Innovation Leadership And Learning Academy*, Pretoria.

Strategic Meaningful Assertive Results-Orientated Techniques for Dealing with People.

## Invited Speaker

2019

**Social Engineering: Why the Human Psyche and the Tendency to Trust Makes Us Easy Prey**, *Legal Innovation and Tech Fest*, Johannesburg.

Invited to present on how social engineering can impact the legal domain.

2019

**Examining the Threat Landscape of Social Engineering in an Emerging Society**, *Information Communication Technology and Society Conference*, Durban.

Invited as a keynote speaker to the international IEEE conference to speak about social engineering and the impact it has on an emerging society.

2018

**Next Generation Networks and the Impact of Social Engineering**, *Centre for High Performance Computing National Conference*, Cape Town.

Invited as a speaker to the annual CHPC conference to talk about the impact of social engineering on the South African National Research Network.

2017

**Social Engineering, How does it influence the Mobile Industry**, *Telstra*, Brisbane, Australia.

Invited to present on Social Engineering Awareness in the Mobile Industry. Presentation was shown Australia wide at all Telstra offices.

- 2017 **Social Engineering: Top Ten Techniques of Building Rapport**, *Kimberley InfoSec Workshop*, Kimberley.  
Invited to present on Social Engineering.
- 2017 **Ethical Hacking**, *ITWeb Hackathon Training*, Pretoria.  
Invited to present on Ethical Hacking.
- 2016 **#FeesMustFall – What Impact Did The Network Infrastructure Have?**, *Centre for High Performance Computing National Conference*, East London.  
Invited as a speaker to the annual CHPC conference to talk about how the South African National Research Network impacted the #FeesMustFall protests.
- 2016 **Social Engineering in the Workplace**, *Meraka Institute*, Pretoria.  
Invited to present on Social Engineering Awareness.
- 2015 **Surface, Deep and Dark Web How can we leverage it to our advantage?**, *Conference on the Investigation of Cyber Crime*, Pretoria.  
Invited to present on the Dark Web.
- 2015 **The Dark Side of Social Media**, *Council for Scientific and Industrial Research*, Pretoria.  
Invited to present on Social Media for Researcher Visibility and Collaboration.
- 2014 **Managing and securing our network in the virtual cloud**, *Enterprise Mobility Conference*, Johannesburg.  
Invited to present on Cloud Security.
- 2014 **Ethical concerns regarding social engineering panel discussion**, *Information Security South Africa*, Johannesburg.  
Invited to chair a panel discussion on social engineering ethics.
- 2014 **Securing Ourselves Against Our Mobile Devices**, *CSIR Cyber Security Awareness Month*, Pretoria.  
Invited to present on mobile security and near field communication uses on mobile devices.

## Committees & Workgroups

- 2019 **ISO/IEC JTC 1/SC 27 IT Security Techniques**, *Proposing and Reviewing ISO Standards on the 27001-27005 ISO Standards*, International.  
Main Rapporteur for the Security Operations Centre Standard and Contributor to the WG4 Standards
- 2018 **BRICS Security Specialists Advisory Panel**, *Proposing and Reviewing Security Policies throughout the BRICS countries*, International.  
Active Contributor
- 2018 **ITWeb Security Conference**, *Annual Hackathon Organisational Committee*, Midrand.  
Active Member
- 2018 **ISO/IEC 27035 - Incident Response Operations**, *Input Committee*, International.  
Active Contributor

- 2017
**Standing Committee on Information System Security (SCISS)**, *Provides input to the Government Information Technology Officers Council (GITOC)*, National.  
Active Contributor
- 2017
**Northern Cape Information Security**, *Security Committee*, Kimberley.  
Active member
- 2015
2019
**EiC**, *The Institute of Electronics, Information and Communication Engineers*, International.  
Active member
- 2015
2019
**Information Security South Africa**, *Program Committee*, Johannesburg.
- 2014
**TC9 - ICT and Society**, *WG 9.10 - ICT Uses in Peace and War*, International.  
Active member
- 2012
**International Workshop on Digital Forensics in the Cloud**, *Organisational Committee*, Johannesburg.

## Achievements

- Awarded National Colours in Sport (Protea Colours) by the Minister of Sport for representing South Africa at an international level in E-Sport.
- Selected to represent South Africa at the 8th E-Sports World Championships in Jakarta, Indonesia by Mind Sports South Africa for the E-Sport: Hearthstone: Heroes of Warcraft.
- Awarded National Colours from Mind Sports South Africa for the draughts and ranked 13th in the world during 2016.
- Developed an academic L<sup>A</sup>T<sub>E</sub>X template utilising the moderncv package and the moderntimeline package and implemented automated BibTeX references. This template is also published for public consumption on ShareLatex under the name of Academic Researcher CV.
- Performed a radio interview on the data breach of the whistle blower website of the South African Police Services.
- Masters thesis forms part of the IT- and Forensic Knowledgebase DVD for the German Federal Police and is supported by INTERPOL, EUROPOL and several academic institutions around the world.
- Received two awards for the final year project in BSc Computer Science. They are respectively Most Viable Business Opportunity and Most Profound Scientific Development Approach.
- Member of the Golden Key Honours Society since 2007.
- One of the top second year students performing the BSc Computer Science degree.
- Helped out at Electronic Sports World Cup and World Cyber Games Preliminaries to manage the competition and maintain the network throughout the competition.

## Languages

Afrikaans **Native**  
English **Fluent**

*Mother Tongue*  
*Daily practice, all work performed in English*

---

## Experience

### Vocational

---

#### 2019 **Senior Manager - Incident Response, CYANRE, Centurion.**

The main role objectives are actively investigate IT related incidents reported by clients in order to co-ordinate a rapid and effective cross-sectional response to major incidents and manage the IR team. This also includes conducting detailed analyses of data gathered via the service management process to identify underlying issues and develop, advise and maintain problem error control processes to minimise or prevent future breaks in service.

**Main duties:**

- Manage in-depth investigations into IT related problems to co-ordinate a rapid and effective cross-sectional response to reported incidents;
- Co-ordinate the rapid and effective handling of major incidents and lead the investigation of problems through root cause analysis or through proactive trend analysis and monitoring;
- Continuous improvement to ensure effective service: Examine potential areas for service improvement and raise proposals with senior management;
- Ensure statutory and legislative knowledge is always current in order to resolve customer complaints, to advise the business on corrective solutions to mitigate risks and to improve the customer experience whilst complying with governance requirements;
- Service delivery to ensure customer satisfaction: Maintain service, quality and desired outputs across the business process by ensuring compliance to tactical policies, procedures and standards;
- Ensure cost efficiency through financial and corporate governance: Contribute to the development and implementation of fit for purpose budgets;
- Continuously build and manage the relationship between the Company and clients;
- People: Lead, coach, guide and develop team reporting to the function;
- Develop internal training material and knowledge sharing practices for continuous improvement and efficacy;
- Develop and perform proactive technical, procedural and governance audits on existing security programs and infrastructure to assist with compliance and security in today's evolving landscape;
- Maintain all administrative tasks.

---

#### 2019 **Extraordinary Senior Lecturer, University of Western Cape, Cape Town.**

This appointment is to allow myself to continue lecturing and publishing research within the academic circles. I am currently appointed within the department of computer science. The main focus of this academic position is to further explore the academic literature related to social engineering, digital forensics and computer security in general. The position also allows me to supervise and mentor students at both undergraduate and postgraduate levels. I am actively providing mentorship and supervision to a wide array of students across several universities within South Africa.

**Main duties:**

- Supervise and mentor undergraduate and postgraduate students;
- Actively publish research at international conferences and in accredited journals;
- Continuously keep up to date on the latest trends and research within the academic space;
- Develop teaching programmes and academic courses for University of Western Cape;
- Present full academic courses and guest lectures at universities across South Africa;
- Maintain and manage all academic funds related to my research;
- Engage with industry clients to secure research funding;

**Senior Information Warfare Specialist, Council for Scientific and Industrial Research, Pretoria.**

Project manager for security assessments for both internal and external clients. Principle developer on several projects on cyber security, digital forensics and social engineering for the South African defence force. Work within the CSIR is considered restricted and as such cannot be written about in depth.

**Tasks and Projects:**

- Authored user manuals for applied research applications;
- Developed applications to perform specialised network attacks and reconnaissance;
- Developed applications to harvest public data and perform topic modelling on the data;
- Developed digital media for security awareness of scholars and young adults;
- Developed malware for the Android operating system;
- Developed security awareness applications to be used by the client;
- Developed network monitoring tools to determine the layout of the network and to predict network attacks;
- Developed policies to prevent social engineering in the CSIR environment;
- Developed cyber security challenges for the annual penetration testing competition;
- Performed incident response during cyber security breaches for government related entities;
- Performed penetration tests on the client's network and server infrastructure; and
- Performed digital forensic investigations for government related entities.

**Main duties:**

- Author proposals for research projects in line with the needs of the client;
- Actively take part and present at research seminars and research conferences;
- Perform collaborative research with university and industry;
- Drafted contracts and obtained external funding to perform research projects;
- Actively engage with external clients and establish new funding streams into the CSIR;
- Project management of all security assessments both within the CSIR and external to the CSIR;
- Supervised students at the university in their post graduate degrees;
- Actively engage with universities and present guest lectures;
- Actively take part in external committees;
- Improved the RD&I processes at the CSIR in significant ways to improve on the turnaround time of projects.



2006  
2011

**Assistant Lecturer, University of Pretoria, Pretoria.**

Presented lectures and practical subjects in the fields of Computer Security and Digital Forensics. Progressed from being a tutor to the position of assistant lecturer.

**Detailed positions:**

- Assistant Lecturer for Digital Forensics (Postgraduate);
- Assistant Lecturer for Computer Security (Postgraduate & Undergraduate);
- Research Assistant on Wireless Sensor Networks;
- Head Tutor for Computer Security (Postgraduate);
- Assistant Lecturer for Computer Networks (Undergraduate);
- Assistant Lecturer for Databases (Undergraduate);
- Head Tutor for Concurrent Systems (Undergraduate);
- Head Tutor for Operating Systems (Undergraduate); and
- Tutor for C# Programming (Undergraduate).

**Main duties:**

- Prepared and presented practical sessions on the specified field of the subject;
- Assisted students with learning activities and provided technical assistance where necessary;
- Participated in the development, administration and marking of exams and other assessments;
- Developed novel computer security assignments based on my expertise within the field;
- Developed digital forensic investigation crime scenes for practical exercises based on work experience within the field;
- Encouraged students to participate in international security challenges and provided guidance with challenges;
- Supervised student groups who had to perform final year projects for degree purposes; and
- Assisted in the development of learning material.

October 2011

**Digital Forensic Investigator, CYANRE, Centurion.**

Performed digital forensic investigations for external clients.

**Main duties:**

- Performed acquisitions of digital evidence from several different types of digital media;
- Performed analysis on digital evidence and identify what activity has occurred on the digital evidence;
- Authored comprehensive reports which presented the facts obtained during the analysis phase; and
- Ensured that a chain of custody of all the evidence items is kept at all times.

2010

**Digital Forensic Investigator, SHAYA, Johannesburg.**

Performed digital forensic investigations for external clients and developed internal software.

**Main duties:**

- Performed acquisitions of digital evidence from several different types of digital media;
- Performed data recovery on digital media;
- Performed analysis on digital evidence and identify what activity has occurred on the digital evidence;
- Authored comprehensive reports which presented the facts obtained during the analysis phase;
- Ensured that a chain of custody of all the evidence items is kept at all times; and
- Developed internal systems for other projects within the organisation.

2007  
2008

**Administrator & Developer, Abacus Recruitment, Pretoria.**

Developed internal applications and performed maintenance and backups of all servers.

**Main duties:**

- o Handled all the day-to-day IT problems;
- o Developed an internal application which automatically captures and delegates CV's sent in by candidates and external job sites;
- o Performed server maintenance and disaster recovery;
- o Developed other applications in ASP and Java;
- o Maintained the MySQL database of the organisation; and
- o Presented internal Java training to the employees.

**Miscellaneous**

2011

**Volunteer, University of Pretoria Disability Unit, Pretoria.**

Assisted students with bursary applications and scribing exams for students with physical disabilities.

2010

**Volunteer, South African Depression & Anxiety Group, Johannesburg.**

Attended a course on depression and suicide counseling for the call center volunteers.

2008

**CCTV Developer, Self-employed, Pretoria.**

Installer of a self developed CCTV system. The system is used to monitor people entering and exiting the building. At night it is used for security purposes. It triggers when an object is detected to be human. It then takes a 10 second recording of the events that follow, which is stored on an external server.

**Skills**

**Digital Forensics**

**Imaging** dd, FTK Imager

**Investigation** FTK, TSK

**Computer Security**

**Social Engineering** Lock Picking, Micro Expressions, Social Engineering Toolkit

**Exploitation Frameworks** Armitage, Metasploit

**Information Gathering** dnsenum, exploitdb, Maltego, Nmap, Wireshark

**Vulnerability Analysis** Nesus, openvas, sqlmap

**Wireless Attacks** Aircrack-NG, Wifite

**Web Vulnerability Analysis** BeEF, Burp Suite, DirBuster, joomscan, Nikto

**Password Attacks** Hashcat

**Reporting Tools** KeepNote

**Development**

**Languages** C, C#, C++, Java, Python, Ruby, Shell/Bash

**Web** Ajax, ASP, Bootstrap, CSS, HTML/XHTML, Javascript, JQuery, PHP

**Formats** XML, YAML/JSON

**Databases** MS Access, MSSQL, MySQL, PostgreSQL, SQLite

**Source Management** Git, SVN

**Tools** Github, Trac

## Systems and Networks Administration

<b>Mail</b>	Exchange, SSMTP	<b>Backup</b>	Backup4all
<b>Web</b>	IIS, Apache, VsFTPd	<b>Networks</b>	Active Directory, DHCPd, VLANs, OpenVPN
<b>Operating Systems</b>	Backtrack, Debian, Kali, Ubuntu, Windows	<b>Virtualization</b>	Amazon Web Services, Linode, Virtual Box, VMWare
<b>Firewalls</b>	Pfsense, Smoothwall, Sonicwall	<b>IDS</b>	Snort
<b>Routers</b>	ddwrt, Mikrotik, OpenWRT	<b>Security</b>	OpenSSH, PGP/GnuPG, SSL
	<b>Office and tools</b>		
<b>Office</b>	OpenOffice, Microsoft Office	<b>Project Management</b>	MS Project
<b>Wikis</b>	MediaWiki	<b>Other</b>	Bibtex, L <sup>A</sup> T <sub>E</sub> X, T <sub>E</sub> X

---

## Journal Publications

2018

Masango, Mfundo, Francois Mouton, Palesa Antony, and Bokang Mangoale. "An Approach for Detecting Web Defacement with Self-healing Capabilities". In: *Transactions on Computational Science XXXII: Special Issue on Cybersecurity and Biometrics*. Ed. by Marina L. Gavrilova, C.J. Kenneth Tan, and Alexei Sourin, pp. 29–42.

2018

Mouton, F., A. Nottingham, L. Leenen, and H. S. Venter. "Finite State Machine for the Social Engineering Attack Detection Model: SEADM". In: *SAIEE Africa Research Journal* 109.2, pp. 133–148.

2016

Mouton, F., L. Leenen, and H. S. Venter. "Social engineering attack examples, templates and scenarios". In: *Computers & Security* 59, pp. 186–209.

2015

Mouton, Francois, Mercia M. Malan, Kai K. Kimppa, and H. S. Venter. "Necessity for ethics in social engineering research". In: *Computers & Security* 55, pp. 114–127.

2012

Malan, M. M. and F. Mouton. "Protecting e-mail anonymity with an Anonymizer Bouncer". In: *Journal of Information Warfare* 11.3, pp. 39–50.

---

## Conference Publications

2019

Oosthuizen, R., L. Pretorius, F. Mouton, and M. M. Molekoa. "Cyber Security Investment Cost-Benefit Investigation Using System Dynamics Modelling". In: *14th International Conference on Cyber Warfare and Security*, pp. 304–314.

2018

Mouton, F., M. Pepper, and T. Meyer. "A Social Engineering Prevention Training Tool: Methodology and Design for validating the SEADM". In: *Twelfth International Symposium on Human Aspects of Information Security & Assurance*. Ed. by Steven Furnell and Nathan Clarke. University of Plymouth, pp. 1–12.

2018

Mutemwa, M. and F. Mouton. "Cyber security threats and mitigation techniques for multifunctional devices". In: *2018 Conference on Information Communications Technology and Society (ICTAS)*, pp. 1–6.

2018

Oosthuizen, R., M. M. Molekoa, and F. Mouton. "System dynamics modelling to investigate the cost-benefit of cyber security investment". In: *6th Annual System Dynamics conference*. Johannesburg, South Africa.

2017

Bell, L. K., F. Mouton, and T. Meyer. "Mobile on-board vehicle event recorder: MOVER". In: *2017 Conference on Information Communication Technology and Society (ICTAS)*, pp. 1–7.

2017

Masango, M., F. Mouton, P. Antony, and B. Mangoale. "Web Defacement and Intrusion Monitoring Tool: WDIMT". In: *2017 International Conference on Cyber-worlds (CW)*, pp. 72–79.

2017

Mouton, F., A. Nottingham, L. Leenen, and H. S. Venter. "Underlying finite state machine for the social engineering attack detection model". In: *2017 Information Security for South Africa (ISSA)*, pp. 98–105.

2017

Mouton, F., M. Teixeira, and T. Meyer. "Benchmarking a mobile implementation of the social engineering prevention training tool". In: *2017 Information Security for South Africa (ISSA)*, pp. 106–116.

2017

van der Merwe, J. and F. Mouton. "Mapping the anatomy of social engineering attacks to the systems engineering life cycle". In: *Eleventh International Symposium on Human Aspects of Information Security & Assurance*. Ed. by Steven Furnell and Nathan Clarke. University of Plymouth, pp. 24–40.

2016

Masango, M., F. Mouton, A. Nottingham, and J. Mtsweni. "Context Aware Mobile Application for Mobile Devices". In: *Information Security for South Africa*. Johannesburg, South Africa, pp. 1–6.

2016

Mouton, F., K. Pillay, and M. C. Van 't Wout. "The Technological Evolution of Psychological Operations Throughout History". In: *Tenth International Symposium on Human Aspects of Information Security & Assurance*. Ed. by S. M. Furnell N. L. Clarke. Plymouth University. Frankfurt, Germany, pp. 266–278.

- 2015  
Mouton, F., L. Leenen, and H. S. Venter. "Social Engineering Attack Detection Model: SEADMv2". In: *2015 International Conference on Cyberworlds (CW)*, pp. 216–223.
- 2014  
Mouton, F., L. Leenen, M. M. Malan, and H. S. Venter. "Towards an Ontological Model Defining the Social Engineering Domain". English. In: *ICT and Society*. Ed. by Kai Kimppa, Diane Whitehouse, Tiina Kuusela, and Jackie Phahlamohlaka. Vol. 431. IFIP Advances in Information and Communication Technology. Springer Berlin Heidelberg, pp. 266–279.
- 2014  
Mouton, F., M. M. Malan, L. Leenen, and H. S. Venter. "Social Engineering Attack Framework". In: *Information Security for South Africa*. Johannesburg, South Africa, pp. 1–9.
- 2014  
van Heerden, R., M. M. Malan, F. Mouton, and B. Irwin. "Human Perception of the Measurement of a Network Attack Taxonomy in Near Real-Time". English. In: *ICT and Society*. Ed. by Kai Kimppa, Diane Whitehouse, Tiina Kuusela, and Jackie Phahlamohlaka. Vol. 431. IFIP Advances in Information and Communication Technology. Springer Berlin Heidelberg, pp. 280–292.
- 2013  
Burke, I. D. and F. Mouton. "An Investigation of the Current State of Mobile Device Management Within South Africa". In: *8th International Conference on Information Warfare and Security*. Vol. 8. Colorado, USA.
- 2013  
de Waal, A. and F. Mouton. "Topic modelling in the information warfare domain". In: *International Conference on Adaptive Science and Technology (ICAST)*, pp. 1–7.
- 2013  
Mouton, F., M. M. Malan, and H. S. Venter. "Social engineering from a normative ethics perspective". In: *Information Security for South Africa*. Johannesburg, South Africa, pp. 1–8.
- 2012  
Mouton, F., M. M. Malan, and H. S. Venter. "Development of cognitive functioning psychological measures for the SEADM". In: *Human Aspects of Information Security & Assurance*. Crete, Greece.
- 2011  
Mouton, F. and H. S. Venter. "A prototype for achieving digital forensic readiness on wireless sensor networks". In: *AFRICON, 2011*. Livingstone, Zambia, pp. 1–6.
- 2011  
Mouton, F. and H. S. Venter. "Requirements for wireless sensor networks in order to achieve digital forensic readiness". In: *6th International Workshop on Digital Forensics and Incident Analysis*. Ed. by N. Clarke and T. Tryfonas. London, UK, pp. 108–121.

2010

Bezuidenhout, M., F. Mouton, and H. S. Venter. "Social Engineering Attack Detection Model: SEADM". In: *Information Security for South Africa*. Johannesburg, South Africa, pp. 1–8.

2009

Mouton, F. and H. S. Venter. "A Secure Communication Protocol for Wireless Sensor Networks". In: *Proceedings of the Annual Security Conference "Security Assurance and Privacy: organizational challenges"*. Las Vegas, Nevada, pp. 1–14.

## Thesis

2018

Mouton, F. "Social Engineering Attack Detection Model". PhD. Pretoria, South Africa: University of Pretoria.

2012

Mouton, F. "Digital Forensic Readiness for Wireless Sensor Network Environments". MSc. Pretoria, South Africa: University of Pretoria.

## References

### University of Western Cape

#### **Prof Louise Leenen**

Associate Professor  
Computer Science Programme  
University of Western Cape  
Cape Town

✉ lleenen@uwc.ac.za

☎ +27 (21) 21 959 3008

📞 +27 (82) 692 3754

### Council for Scientific and Industrial Research

#### **Dr Renier van Heerden**

Project Manager  
South African National Research Network  
Council for Scientific and Industrial Research  
Pretoria

✉ renier@sanren.ac.za

☎ +27 (12) 841 3434

📞 +27 (82) 331 0704

#### **Ivan Burke**

Senior Researcher  
Cyber Defence  
Council for Scientific and Industrial Research  
Pretoria

✉ iburke@csir.co.za

☎ +27 (12) 841 3747

📞 +27 (82) 631 2173

University of Pretoria

**Prof H. S. Venter**

Professor

Department of Computer Science

University of Pretoria

Pretoria

✉ [hventer@cs.up.ac.za](mailto:hventer@cs.up.ac.za)

☎ +27 (12) 420 3654

📞 +27 (83) 458 4407

**Prof Martin Olivier**

Professor

Department of Computer Science

University of Pretoria

Pretoria

✉ [molivier@cs.up.ac.za](mailto:molivier@cs.up.ac.za)

☎ +27 (12) 420 2052