

Thuraisingham Maria Venthan

University Lecturer/ Professor



About

I am a Lecturer/Professor in the Faculty of Accounting and Informatics at Durban University of Technology. With a wide range of knowledge and experience, I have been a faculty member since March 2023. Prior to this, I served as a Lecturer in the Department of Information and

Communication Technology at the Limkokwing University of Creative Technology since 2009. Additionally, I worked as a Computer Scientist in the Center for Research in Computer Science and Engineering from 2019 to 2022.

As an IT professional, I am results-oriented with proven leadership skills. I am a Fellow of the ICSES, SSRN from Elsevier, Engineering: Open Access, IEEE. My passion lies in cybersecurity, where I excel in aligning security architecture, plans, controls, processes, policies, and procedures with security standards and operational goals.

Education

Doctor of Philosophy – 2022

Doctor of Philosophy in Cyber Security Administration from International University of America (London Campus).
Title: Cybercrimes: Validating Digital Forensic and Cyber Crime Evidence

Master of Science - 2013

Degree of Master of Science in Information Technology in year 2013 from Madras University, India. which I passed with first class with merit and was the batch topper in the overall African region.

Bachelor of Science - 2006

Degree in Bachelor of Science (Physics, Mathematics and Computer Science) in the year 2006 from Bangalore University, India.

Diploma - 2005

Diploma in Dot Net Technology in the year 2005 from Data Pack Computer System, Sri Lanka.

Diploma - 2004

Diploma in Software Management in the year 2004 from APPTECH (Apple Technologies), India.

Diploma - 1999

Diploma in Management in the year 1999 from Millennium City Academy, Issued in London.

Personal



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www.cv.venthan.net



www.facebook.com/venthan

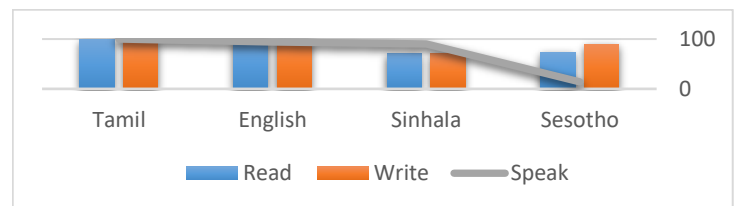


www.twitter.com/TMVenthan



www.google.com/atmventhan

Language skills



Membership



[0009-0004-6350-7922 - ORCID](https://orcid.org/0009-0004-6350-7922)



Institute of Electrical and Electronics Engineers (Co) - Member



International Computer Science and Engineering Society - Member



International Association of Engineers - Member



National Cyber Security Alliance (NCSA) – Member



Cisco Systems, Inc. - Member



Social Science Research Network

My application was deemed as "Most Competitive" for the post of Data Scientist (GS-14) by FBI in the year of 2020.

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My Publications for the Current Year (2023)

Title: A Study of Cybersecurity Challenges And Emerging Trends on Lat-Est Technologies in Lesotho

2023 | Journal article

DOI: 10.2139/ssrn.4472582

Part of ISSN: 1556-5068

Journal: Social Science Research Network

Publisher: Elsevier

Title: Cybersecurity in Lesotho: Current Challenges and Future Opportunities

2023 | Journal article

DOI: 10.2139/ssrn.4459493

Part of ISSN: 1556-5068

Journal: Social Science Research Network

Publisher: Elsevier

Title: Protecting IoT Infrastructure: Understanding Vulnerabilities, Threats, and Intruders in Cybersecurity

2023 | Journal article

DOI: 10.2139/ssrn.4509154

Part of ISSN: 1556-5068

Journal: Social Science Research Network

Publisher: Elsevier



Representing the following committees at Durban University of Technology

Chairperson: Faculty Research Ethics Committee (DUT-FREC)

Member: Faculty Research Committee (DUT-FRC)

Member: DUT-Institutional Research Ethics Committee (DUT-IREC)



Assessor at Stadio



International Baccalaureate®

Examiner at International Baccalaureate

Supervision:

Ph.D.: 2 candidates

Master's: 2

Currently, I am supervising 1 PhD candidate and 3 Master's students at DUT.

Examiner:

Master's: 4

Training Certificates

- Introduction to Research Ethics
- Research Ethics Evaluation
- Informed Consent

Issued by: The University of Hong Kong

This Training program was supported by :

1. European and Developing Countries Clinical Trials Partnership (EDCTP) (www.edctp.org)
2. Swiss National Science Foundation (www.snf.ch)
3. Canadian Institutes of Health Research (<http://www.cihr-irsc.gc.ca/e/2891.html>)
4. Swiss Academy of Medical Science (SAMS/ASSM/SAMW) (www.samw.ch)
5. Commission for Research Partnerships with Developing Countries (www.kfpe.ch)

I deliver open lectures at other universities

BENNETT UNIVERSITY
THE TIMES GROUP

SCHOOL OF COMPUTER SCIENCE ENGINEERING & TECHNOLOGY

STUDENT SESSION

An Introduction to Big Data:
What it is and Why it Matters

SPEAKER
Dr. T.M.Venthan
Durban University of Technology, South Africa

Monday, 08th May 2023
02.00 PM IST

SCAN HERE TO JOIN MEETING

#BennettUnivInternational

PREPARING INDIA TO MOVE WITH THE TIMES

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Work Experience

Highpana Projects cc

IT & Principal Cyber Security Manager

15/6/2022 – 28/02-2023

- Analyse and correlate information security events to identify appropriate event handling actions.
- Assess operational and implementation costs, and evaluate them against the potential business impact if the policies and controls are not implemented.
- Assess the effectiveness of the measures against security risk management plan.
- Develop IT security policy and operational procedures based on information collected.
- Develop a documented action plan containing policies, practices and procedures that mitigate the identified risks.
- Document information related to IT security attacks, threats, risks and controls.
- Establish a standard methodology for performing security tests in accordance with security requirements.
- Establish review procedures based on organization's security risk management plan.
- Evaluate effectiveness of current incident response plan against industry good practices.
- Evaluate response plans periodically to ensure relevance.
- Identify threats and risks that are relevant to organization's operations and systems.
- Monitor the effectiveness of action plans in addressing information risks.
- Obtain corporate management's endorsement of security policies, standards and procedures by articulating cost and benefits.
- Perform comparative analysis of security service performance level parameters against security information sources.
- Prepare information security performance report based on results from analysis and correlation of information security events.
- Rate and categories potential security incidents.
- Recommend suitable enhancements to improve information security performance.
- Review business and security environment to identify existing requirements.
- Review security policies, standards and procedures by considering the threats identified and other information collected.
- Test incident response plans periodically to ensure response times and executed procedures are acceptable.

Lesotho Housing and Land Development Corporation

IT Consultant

7/4/2015 – 30/11/2019

- Provide strategic guidance to clients on general technology and IT infrastructures
- Provide expert technical assistance to clients, including training and feedback
- Meet with clients to determine project requirements and goals; define the scope of the partnership, plan timelines, and set deadlines
- Travel to client locations to collaborate on projects
- Communicate with staff at all levels of client organizations
- Conduct research as needed to gain a thorough understanding of customers' system specifications, work practices, and the nature of the business
- Define client hardware, software, and network requirements
- Analyze customers' IT needs; provide independent and objective advice for improvement
- Develop solutions and present proposals to clients orally and in writing
- Implement agreed-upon solutions for new and improved IT systems
- Assist clients through the change-management process
- Design, test, install and monitor IT systems
- Prepare documentation and progress reports for clients
- Create training materials for client users and other consultants
- Identify potential clients; build and maintain contacts.

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Work Experience

Limkokwing University of Creative Technology – Lesotho Campus

Lecturer

6/8/2009 – 31-1-2022

- Deliver lectures, seminars and tutorials
- Design, prepare and develop courses and teaching materials
- Develop and implement new methods of teaching to reflect changes in research
- Assess students' coursework, Set and mark examinations
- Supervise students' research activities, including final year undergraduate projects, supervise my own research group, which typically includes research assistants (postdocs)
- Support students through a pastoral or advisory role
- Undertake personal research projects and actively contribute to my institution's research profile
- Write up research and prepare for publication
- Prepare bids to attract funding to my department for a range of research projects
- Carry out administrative tasks related to the department, such as student admissions, induction programs and involvement in committees and boards
- Contribute to professional conferences and seminars in my field of expertise
- Establish collaborative links with other institutions, as well as industrial, commercial and public organizations
- Participate in staff training activities.

Joy to the World

System Engineer

6/8/2007 - 15/1/2009

- Coordinates and / or performs additions and changes to network hardware and operating systems and attached devices; includes investigation, analysis, recommendation, configuration, installation and testing of new network hardware and software
- Provides direct support in day-to-day operations on network hardware and operating systems; duties include evaluation of system utilization, monitoring response time and primary support for detection and correction of operational problems
- Troubleshooting at the physical level of the network, working with network measurement hardware and software, as well as testing hardware devices, at the logical level working with communication protocols
- Participates in planning design, technical review and implementation of new network infrastructure hardware and network operating systems for voice and data communication networks
- Maintains network infrastructure standards.

KMS

IT Manager

1/5/2005 - 20/10/2006

- Accomplishes information technology staff results by communicating job expectations; planning, monitoring, and appraising job results; coaching, counseling, and disciplining employees; initiating, coordinating, and enforcing systems, policies, and procedures.
- Maintains staff by recruiting, selecting, orienting, and training employees; maintaining a safe and secure work environment; developing staff growth opportunities.
- Maintains organization's effectiveness and efficiency by defining, delivering, and supporting strategic plans for implementing information technologies.
- Directs technological research by studying organizational goals, strategies, practices, and user projects.
- Completes projects by coordinating resources and timetables with user departments and data centers.
- Verifies application results by conducting system audits of technologies. Preserves assets by implementing disaster recovery and backup procedures and information security and control structures.
- Recommends information technology strategies, policies, and procedures by evaluating organization outcomes; identifying problems; evaluating trends; anticipating requirements.
- Accomplishes financial objectives by forecasting requirements; preparing an annual budget; scheduling expenditures; analyzing variances; initiating corrective action. Maintains quality service by establishing and enforcing organization standards.
- Maintains professional and technical knowledge by attending educational workshops; reviewing professional publications; establishing personal networks; benchmarking state-of-the art practices; participating in professional societies. Contributes to team effort by accomplishing results as needed.

Greenwich Lanka (pvt) Ltd.

Software Programmer

1/1/2005 - 4/4/2005

- Reviewing current system, presenting ideas for system improvements, Including cost proposals
- Working closely with analysts, designers and staff, producing detailed specifications and writing the program codes
- Testing the product in controlled, real situations before going live, Preparation of Training manuals for users
- Maintain the system once They are up and running

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Work Experience - Part Time

Nation Trust Bank

Investment Advisor

17/6/2006 - 20/10/2006

Morgan Rosso Group (pty) Ltd.

Software Engineer

6/4/2011 - 9/4/2012

IDM

External Consultant

1/3/2012 - 7/11/2013

Eco solutions (Pty) Ltd.

IT Manager

15/5/2012 - 30/10/2013

Center for Research in Computer Science and Engineering

Computer Scientist

01/01/2019 – Date

Work Experience as a Consultant

I was an ICT consultant to the following Lesotho Government Departments through Victoria Technologies (PTY) Ltd.

- Ministry of Communication Science and Technologies.
- Ministry of Education.
- Police Complaint Authority.
- Botha-Bothe Local Government.

in addition to the above I was also consultant at the following organizations

- Christian Council of Lesotho.
- RTS Groups (Pty) Ltd - South Africa.
- Khali Hotel.



Technical Skills



Network Security



Web Server Management



Web Development

(eg: <http://www.lesothohousing.org.ls> ,
<http://www.lesothotoday.gov.ls> ,
<http://www.victoriatechnologies.net> ,
<http://www.ccl.org.ls> , <http://www.mralk.ch>
etc..)

Mail server client



Exchange

Database(s)



Microsoft SQL Server



Local web server for testing and deployment purposes



XAMPP

Integrated development environment (IDE)



Visual Studio

Hypervisor(s)



Microsoft Hyper-V



VirtualBox

Office application(s)



Office 365



Outlook



Word



Excel



PowerPoint



OneNote



OneDrive



Skype for Business



Lync



Access



Publisher



SharePoint



Yammer



Delve



Visio



Project Online

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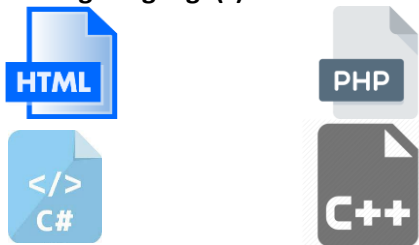
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Multimedia authoring tool(s)



Programming Language(s)



Operating System(s)



Server-Side Operating System(s)



- Familiarity with Active Directory infrastructure according standard process and procedures.
- Knowledge of Active Directory architecture design and implications.
- Knowledge & Experience in group policies, Login Scripts and troubleshooting & implementation.
- Knowledge of methods for quality assurance.



Additional Acquirements

- I conducted workshop titled "Ethical Hacking and Cyber Security" to Lesotho Mounted Police Service and Lesotho Correctional Service during 21 to 25 August 2007.
- I conducted Seminar titled "Get started in Web Design" at Limkokwing University of Creative Technology, Lesotho on 28 September 2017.
- I conducted competition titled "Hackathon" at Maseru Avani through UNDP during 20 to 22 April.



Cyber security skills

- Design and implement internal and external IT security audit reports
- Perform penetration testing
- Enforce security by design methodologies, development and implementation of systems
- Assign security requirements for information systems and identifying vulnerabilities
- Extensive knowledge of all common business-related IT functions
- Adept at preparing detailed training procedures
- Solid understanding of various security software applications



Research Experience

Doctoral Research

Cyber Security Administration | International University of America (London Campus).

Dissertation

Title: Validating Digital Forensic and Cybercrime Evidence

This dissertation focuses on the forensic validation of computer evidence. It is a burgeoning field, by necessity, and there have been significant advances in the detection and gathering of evidence related to electronic crimes.