Konanani Leonardo Maduguma

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Objective

I am a Computer Science graduate with a solid understanding of business analysis, data interpretation, software development, networkong & cyber security. I am proficient with programming languages like C#, Java, Python, SQL, HTML & CSS and I'm eager to apply these skills in a professional setting. I'm looking for an entry-level role where I can contribute to solving business challenges, improve processes, and grow within a dynamic team environment.

Experience

- **Department of Home Affairs** 15/01/2024 - 20/12/2024
  Digitisation Manager - Intern
  - Managing and leading teams.
  - Overseeing the management of records.
  - Responding to information inquiries.
  - Managing resources.

Education

- **Sol Plaatje University** 2023
  Bachelor of Science Honours in Computer Science
- **University of Venda** 2019
  Bachelor of Science in Computer Science
- **Thengwe Secondary School** 2015
  Grade 12

Personal Details

- Date of Birth : 21/12/1998
- Nationality : South African
- Gender : Male
- Driving Licence : C1 with PrDP

Skills

- IT Business Analysis
- Software Development
- C#
- Java
- Python
- HTML & CSS
- SQL
- Data Analysis
- Cyber Security Analysis
- Networking
- Database Management
- System Analysis
- Computer Ethics
- Collaborative Team Player
- Solution-Driven

- Effective Communication
- Adaptive & Flexible
- Critical Thinking

Projects

- **Towards a multiple key biometric authentication scheme for ensuring trust in virtual workspaces.**
  The research project has reviewed literature in order to collect the (secondary) data on Biometric authentication models and how they differ considering: accuracy, protection against spoofing, ease of use (usability), privacy protection, input device portability, user acceptance, cost efficiency, behavioural/physical attribute changes, independence from hygiene or contactless, independence from climate, Independence from environmental changes and aliveness detection capability. After collecting the data, it was cross-tabulated and Fingerprint recognition together with iris recognition was found to be the best models and they were used as individual keys and pairwise keys in line with multiple key biometric authentication scheme recommended for virtual workspaces. The proposed model was experimented with and was found to be more secure than the traditional one. It is more secure than the traditional one, means that it has the high potential of being trusted.

Publications

- **Multi-Key Asymmetric Cryptography: A model for persevering privacy in Work-From-Home Environments.**
  Gundu, Tapiwa & Maduguma, Konanani. (2024). Multi-Key Asymmetric Cryptography: A Model for Preserving Privacy in Work-from-Home Environments. European Conference on Cyber Warfare and Security. 23. 287-295. 10.34190/eccws.23.1.2290.

Languages

- English - Proficient
- TshiVenda - Native
- isiZulu - Basic
- Sepedi - Basic

Reference

- **Dr. Tapiwa Gundu - Nelson Mandela University**
  Senior Lecturer
  tapgun@gmail.com
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- **Fires Jansen Van Vuuren - Murray and Roberts Cementation**
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