

# Werner Bisschoff

*Computer and Electronic Engineering Graduate*



## Profile

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| Personal | Dependable and persevering, I continuously strive for improvement and efficiency. I am a critical thinker and a problem solver. My hobbies include photography, playing the ukulele, and casual online gaming  |
| Career   | My goal is to work in a software development position and to constantly improve myself and my workflow. I am a fast learner and always willing to adapt, learn and improve. I aim to deliver thorough, detailed work with patience and determination. I believe in good communication and mutual respect in the workplace. |

## Education

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|---------------------|--|
| Feb 2015 – Dec 2019 | <b>B.Eng. Computer and Electronic Engineering, North-West University, Potchefstroom, 66%.</b> <ul style="list-style-type: none"><li>○ Final year project included an <i>Android</i> application to emulate an NFC payment system based on the ISO 14443 protocol</li><li>○ Learned how to work in multi-disciplinary teams</li><li>○ Learned how to manage deadlines and large workloads</li><li>○ Learned how to put together a neat and concise report using <i>LATEX</i></li><li>○ Utilised object oriented programming to create a tower defense game using <i>Qt C++</i>, including pathfinding and network communication</li><li>○ Performed data analysis on large spreadsheets by use of <i>Python</i>, <i>Julia</i> and <i>Jupyter Notebook</i></li><li>○ Worked on an app to communicate between two devices using NFC and encryption</li><li>○ Implemented a PID controller with an <i>Arduino</i> to control a DC motor using control theory</li></ul> |
| Jan 2010 – Dec 2014 | <b>National Senior Certificate, Hoërskool Wesvalia, Klerksdorp, 86%.</b><br>Graduated in the top 10, with six distinctions.  |

## Experience

- Nov 2020 – **Freelance Full Stack Developer**, *Expandage*, Remote.
- Dec 2020
- Created a full stack content management system using *React.js*, *Django*, *Python* and *PostgreSQL*
  - Created a REST API with *Django Rest Framework* to serve as a CRUD interface with both a local database and an external API
  - Created a recurring script to check for state updates for client data and update the database
  - Created an intuitive front end user interface using *CSS*, *HTML*, *TailwindCSS*, *JavaScript* and *React.js*
  - Utilised live reload with *Visual Studio Code*
  - Utilised *Parcel* to bundle the application
  - Worked on a remote server via *SSH* and *Visual Studio Code*
- Feb 2020 – **Junior Lecturer**, *North-West University*, Potchefstroom.
- Jul 2020
- Lecturer for *Introduction to Programming with Python*
  - Learn to work with and teach to programming newcomers with various backgrounds
  - Wrote a *Python* script which utilised *Moss* and *mossipy* to check for similarities between student submissions and analyse results
- Nov 2018 – **Software Engineering Intern**, *Jurumani Solutions*, Midrand.
- Dec 2018
- Worked on a cloud-based service using *Python*, *Flask*, *MySQL* and *AWS S3* to be able to easily and remotely send a print job to a network-connected printer
  - Worked on a solution, using *Python* and a virtual environment, to extract data from multiple types of invoices and to store or send the data in JSON arrays
- Jun 2018 – **Software Engineering Intern**, *Nanoteq*, Centurion.
- Jul 2018
- Gained experience with encryption, decryption and hashing
  - Worked on a cryptography software using *C++ Builder*
  - Added functionality to and fixed bugs within existing code
  - Improved upon GUI to make it more user friendly and visually pleasing

## Other Skills

- Applications
- Creation of professional reports with *L<sup>A</sup>T<sub>E</sub>X*
  - Desktop and development use of various *Linux* distributions
  - Compiling from source code
  - Hobbyist use of *Darktable*, *GIMP* and other photo manipulation software
- Other
- Current clean driving license

## Languages

- |           |        |                                       |
|-----------|--------|---------------------------------------|
| Afrikaans | Fluent | <i>Home Language</i>                  |
| English   | Fluent | <i>Language of Tertiary Education</i> |

## Contact Details

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