

# Werner Bisschoff

*Computer and Electronic Engineering Graduate*



## Profile

- 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

- Feb 2015 – Dec 2019 **B.Eng. Computer and Electronic Engineering**, *North-West University*, Potchefstroom, *66%*.
- Final year project included an *Android* application to emulate an NFC payment system based on the ISO 14443 protocol
  - Learned how to work in multi-disciplinary teams
  - Learned how to manage deadlines and large workloads
  - Learned how to put together a neat and concise report using  $\text{\LaTeX}$
  - Utilised object oriented programming to create a tower defense game using *Qt C++*, including pathfinding and network communication
  - Performed data analysis on large spreadsheets by use of *Python*, *Julia* and *Jupyter Notebook*
  - Worked on an app to communicate between two devices using NFC and encryption
  - Implemented a PID controller with an *Arduino* to control a DC motor using control theory
- Jan 2010 – Dec 2014 **National Senior Certificate**, *Hoërskool Wesvalia*, Klerksdorp, *86%*.  
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 *mosspy* 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  $\text{\LaTeX}$
  - 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	Home Language
English	Fluent	Language of Tertiary Education

---

## Contact Details

Phone 071 826 2066  
Email [wbisschoff13@gmail.com](mailto:wbisschoff13@gmail.com)  
LinkedIn [za.linkedin.com/in/wbisschoff13](https://za.linkedin.com/in/wbisschoff13)