



COMPUTER ENGINEER

NATHAN RETIEF

GET IN CONTACT

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OTHER SKILLS

- Programming Languages: Assembly, C, C#, C++, Java, Python
- Operating Systems: Windows and Linux
- Applications: Autodesk Eagle & Fusion 360, Microsoft Office Suite
- Misc: Latex (document preparation system)
- The ability to analyze complex technical problems
- Design and implement embedded systems
- Detail oriented
- Excellent problem solver

PRACTICAL KNOWLEDGE

- Hardware development
- Virtual Reality
- USB & Bluetooth Protocols
- Sensor Fusion
- Embedded devices
- BMS Systems
- IoT Systems
- 3D Modelling
- PCB Design
- Debugging Methodologies

PERSONAL PROFILE

Nationality: South African Home language: English (Fluent)
ID Number: 9509135077080 Other languages: Afrikaans (Proficient)

EDUCATION HISTORY

UNIVERSITY OF PRETORIA

Bachelor of Engineering | Computer Engineering

- Graduated 2020
- 4th Place in 2019 EMK310 Race Day as a solo entry.

HATFIELD CHRISTIAN SCHOOL

Primary and High School 2001 – 2014, Pretoria

- 3 Distinctions
- Programmed a Puzzle Game that placed Top Ten at the St. Benedicts College Information Technology Showcase in 2014

WORK EXPERIENCE

EMBEDDED INTEGRATION ENGINEER

Gravitronic Engineering | January – October 2021

- Conceptualised and designed consumer electronic devices from inception to market.
- Developed Battery Management Systems, IOT Devices and miscellaneous electronics.
- Member of the Management Team and involved in strategic planning of products.

Michael Oosthuizen: +27 76 216 6237 | Daksitha Gunasekara : +27 81 271 1218

R&D INTERN

Etion Create | January 2020

- Implemented Continuous Data Protection on the backend of a Raspberry Pi Zero using C code and the Nano terminal test editor to edit the kernel of the Linux operating system and Python in Spyder 3.6 for rollbacks of backups.

Vanessa Pelsner: +27 12 678 9740 (ext. 9831) vanessa.pelsner@etion.co.za

COURSE CREATOR & TUTOR

Resolute Robotics | 2019

- Wrote a Bluetooth and Android app development course for grade 8–12 students.
- Taught and tutored grade 7–12 students programming in C/C++ for Arduino hardware and electronics.

Rajesh Pasungili: +27 83 742 3912 | Gareth Thomson: +27 79 877 9947

STUDENT ENGINEER

EMS Industries | Summer and Winter Recesses 2012 – 2018

- Assisted in maintenance and assembly of hardware systems.
- Researched for potential projects.
- Programmed data handling subroutines.

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