

Mr. Justin GRAVE

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 23 years old – Driving license

**EDUCATION**

- December 2010 **Tshwane University of Technology / ESIEE Amiens, Pretoria (South Africa)**
MSc. Power and Energy Systems – Master of Engineering Program
 - Principal Courses:
- Engineering system management
 - Research methodology
 - Energy management and economics
- June 2010 **ESIEE Amiens – Engineering degree (BB levels) – With Honors**
 - Specialization : Power engineering and sustainable development
- Power Conversion, Power Systems
 - Embedded and real time systems, Control methods
 - Renewables Energies, Software engineering
- General courses
- Signal theory, Theory of waves
 - Project management, Team work
 - Management: Communication, Team management
- June 2004 **Lycée Ozanam, Lille – Baccalauréat STI Electrotechnique (A Levels)**
- Languages **French:** mother tongue
English: fluent – Bulats (89/100)
Japanese: academic basics – WJEC (level 1, topic 3)
Chinese (Mandarin): notions
- Computer skills Microsoft office, Lotus notes, Matlab – Simulink, programming (C, C++, HTML, PHP, VHDL), MacOS X, Labview

PROFESSIONAL EXPERIENCE

- 2010 (10 months – MSc project) **Tshwane university of technology, Pretoria (RSA) – Power Electronics**
 - Design of an electrical conversion chain for railways applications
 - Use of multilevel converters to improve the quality of energy
- Enhancement of the transmission capacity
 - Improvement of the power rate and reduction of the THD
- Use of space vector modulation in order to control the converters
- Quicker control response and lower switching frequency
 - Smaller THD than Pulse Width Modulation
- 2009 (5 months – Internship) **VALEO VEES, Cergy-Pontoise – EMD - System**
 - Design of electronical components for a matlab simulink library
- PWM generation including dead times control
 - Measuring devices for converters and control methods
- Comparison of the Simscape library and the Simulink library
- Computing times and accuracy of results
 - Model-based design programming
- 2007 – 2008 (10 months – Open-ended contract) **Pizza Hut, Paris, Amiens – Multi-task employee**

INTERESTS

Website: <http://justin.grave.free.fr>
 Sports: Football and tennis

Asian culture
 New technologies

References upon request

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