

Software & Mathematical Programming

EDUCATION

2009	MSc (Operations Research), Stellenbosch University (Cum Laude)
2007	MSc Hons (Applied Mathematics), Stellenbosch University (Cum Laude)
2005	BSc (Mathematical Sciences), Stellenbosch University
2001	Matriculated with Distinction at De Kuilen High

EXPERIENCE

2014 - present	Actualiser <u>Actualiser</u> employs lean and agile principles to provide software product development and general technology consultancy services, often collaborating with a wide variety of people and organisations.
Software Developer	As part of the Actualiser team, I focus mainly on developing Android applications, iPhone and iPad (iOS) applications as well as some Mac OS X applications.
2012 - present	RealityGate <u>RealityGate</u> conducts research, develops intellectual property and creates prototype applications in the field of human-computer interaction.
Researcher & Software Developer	Prototype application development takes place mostly on the Android and iOS platforms. Research includes the exploration of prior art, patent infringement and other academic publications. I have also been involved with the writing and review of patent applications.
2010 - 2012	NioCAD <u>NioCAD</u> was responsible for the development of NioPulse, a Computer Aided Design (CAD) software package focusing on superconductive digital electronics.
Software Developer	During the first year of employment, main objectives included working on the Java implementation of the CAD package. Time was also allocated to technical writing and automated software testing.
Project Manager	During the second year of employment, principles from the agile software development environment were employed in order to divide long term goals into short to mid term tasks, as well as the allocation thereof. Some software development duties were still continued.
2009 - 2010	Operations Research Consultancy (Oprecon) <u>Oprecon</u> was a consulting firm supplying specialised services and products to clients through the use of analytical and mathematical techniques (now trading as Xtranda).
Part-time Researcher	As Part-time Researcher, the main area of focus included the research of competitor products. As well as employing mathematical programming libraries to design a software package for solving specified scheduling problems in the industry.
Data Analyst	Projects, mainly in forestry, included the updating of AIMMS scheduling tools supplied to clients by Oprecon and also manipulation of data using Microsoft SQL Server on a weekly basis with report generation by means of VBA and Excel.
2006 - 2008	Other Other work experience include the tutoring of Applied Mathematics, Probability Studies and Operations Research students while studying at Stellenbosch University as well as occasional lecturing. I was also assistant to ORiON Journal Editor, Prof JH van Vuuren, mainly focussing on correspondence with both authors of submitted articles and the relevant referees. Ensuring the correct format of papers and correspondence letters and on occasion researching the possibility of submitted paper authenticity.

SKILLS

Problem Solving	Excellent analytical and logical reasoning skills. Able to pick up new skills quickly.
Programming Languages & Platforms	Most experienced with mobile application languages, Android and iOS. Have previously worked with Java, Python, SQL. Can become proficient in any of these (or other) languages upon request.
Other Technologies	Operating Systems: Mac OS X, Windows, Linux, iOS and Android Web technologies: CSS, Wordpress and php Source control: Git, Mercurial, Subversion Document Editors: Microsoft Office, Open Office, iWork office suites and LaTeX Optimisation Tools: AIMMS, Lindo, Lingo and LPSolve Numerical Computing: Mathematica and MATLAB

REFERENCES

Masters Degree Supervisor	Prof JH van Vuuren, PrSciNat <u>Professor of Operations Research</u> Department of Industrial Engineering Faculty of Engineering Stellenbosch University Tel : +27 21 808-4244 Email: vuuren@sun.ac.za
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