

**Curriculum Vitae**  
**for Johann L. Botha**

Ref JOECV

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WRITTEN BY	Mr. Johann Botha	December 26, 2007	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME
1	11/05/2006	2006 Release	J. Botha
2	13/11/2007	2007 Release	J. Botha

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## 1 Summary

Johann has a wide range of experience in the Information and Communications Technology industry. Motivated and independently thinking with first-class analytical, design and problem solving skills. He has a successful eight year businesses track record.

## 2 My Current Work Status

At the moment I am working for Frogfoot, Amobia, Blio and Teraco.

## 3 Contact Details

Contact Details	
eMail	<a href="http://www.swimgeek.com/contact/">http://www.swimgeek.com/contact/</a>
Homepage	<a href="http://www.swimgeek.com/">http://www.swimgeek.com/</a>
Office Number	+27 21 689 3867

Street Address	Postal Address
29 Trevi Court	P.O. Box 23618
De Lorentz Street	Claremont
Gardens	Cape Town
Cape Town	7735
South Africa	South Africa

## 4 Personal Information

Personal Information	
Date of Birth	4 July 1977
Age	30
Sex	Male
Citizenship	Republic of South Africa
Place of Birth	Pretoria, South Africa
Marital Status	Single
Smoking	No
Vehicle License	Yes
Passport	SA with 10 Year US Visa

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## 5 Skills

### 5.1 Key Skills

- Unix and IP network, Systems Administration
- Network Design and Management
- Web-based Database-driven Systems Design and Development
- Directory Services (LDAP)
- Technical Sales
- Product Design
- Technical Writing and Documentation

### 5.2 Unix/OS Skills

- GNU/Linux since February 1997, kernel 2.0.17
- FreeBSD, OpenBSD since October 1999
- Solaris since April 2000
- Cisco IOS since July 2000, version 11
- Apple OSX since March 2004
- AIX, HP-UX, BeOS, OS/2, Mikrotik

### 5.3 Software Development Skills

- PHP, Perl, C, sh, PLPgreSQL, sed, awk, GNU Make
- Relational Databases, PostgreSQL, MySQL
- Cryptography, GnuPG, OpenSSL, GnuTLS, X.509 CA, SMIME
- XML, (X)HTML, CSS, DocBook-XML, XSLT, LaTeX
- Version Control Systems, Subversion, CVS
- User Interface Design

### 5.4 Networking and ICT Industry Skills

- Cisco experience: 800, 1600, 1700, 2500, 2600, 4500 series Routers
  - Cisco 2950, 3548, 3560, 3750, Layer 2 and Layer 3 Switches
  - 802.1q VLAN Trunking, 802.1p, 802.11x Port Auth, 802.3ad Etherchannel Bonding
  - 802.11a/b/g indoor and outdoor Wireless LAN Equipment
  - VoIP: Asterisk PBX, SNOM and Cisco Phones
  - Lucent Portmaster Network Access Devices
  - Radius Authentication and Accounting
-

- Sun Microsystems Hardware, Solaris 9 and Linux on Sparc64
- VSAT and related asymmetric Satellite bandwidth routing technologies
- Firewalls/NAT and Security, IPTables, BSD IPFW and IPF
- IP Tunnelling and VPNs: IPIP, GRE, IPSEC, OpenVPN
- Quality of Service (QoS): Cisco, Linux, FreeBSD
- IP Routing and Route Distribution: eBGP, iBGP, OSPF
- IP Space Planning and Migration. Acquired and managed a /19, /20 and /21 IPv4 network and two AS Numbers in the global routing table
- RPSL and dealing with Routing Registries like RADB
- DNS Management Systems, based on djbdNS and OpenLDAP
- Mail Servers, Qmail, Qmail-LDAP, Exim, Postfix
- Web Servers, Apache-modssl
- DHCP, DDNS, FTP, HTTP Proxy, NTP, NFS, Public Key Servers and extensive LDAP experience
- IP Accounting, Graphing and Statistics, Netflow, RRDTOOL
- Datacenter Design and Management, Cabling, UPS and Aircon Systems
- Large scale Clustering and OS Virtualization with Xen and Linux
- ISP Accounting and Network Management Systems Design
- Metro Ethernet and large scale Ethernet switch fabric design
- Online media tools: Wordpress CMS, RSS/ATOM, Wiki's, Mailman, AWStats, Planet

## 5.5 Language Proficiency

Language	Skill
English	Speak / Read / Write (Excellent)
Afrikaans	Speak / Read / Write (Excellent)

## 5.6 Misc

- Lecturing Technical Training Courses
- Touch Type 60wpm on the DVORAK Keyboard Layout
- Graphic design tools on Mac OSX, Freehand and Photoshop

## 5.7 Business

I have been running businesses since the age of 19. I am an entrepreneur and an innovative thinker. One of my passions is the study of brands, their evolution and the power they have in the mind of the customer.

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## 6 Work Experience

- *January 2007 to Current* :: [Teraco](#)

Cape Town : Co-Founder, Director

Started the first vendor neutral datacentre business in South Africa.

- *August 2005 to December 2005* :: [Amazon Development Centre South Africa](#)

Cape Town : Full Time Employment as Senior Systems Engineer.

Working as part of a small team of highly skilled senior developers in Amazon.com, Inc's Web Services division.

Systems Design and Administration. [Xen](#) Virtual Server Technology. OSPF Anycast DNS system using Cisco and Quagga. XML-RPC. Cisco Layer 3 Switches. DHCP, DDNS, PXE booting and Bind9, Linux, Red Hat Fedora Core 4. DBAT (Daily Build and Test) system. Bug tracking system.

- *July 2000 to Current* :: [Frogfoot Networks](#)

Cape Town / Stellenbosch : Co-Founder, Director

Formed an ISP called Frogfoot Networks and gained valuable networking and business experience. Frogfoot successfully acquired and integrated another ISP business in 2007. Frogfoot is currently running smoothly and growing at a good rate. I created the brand name and designed the logo.

Frogfoot runs almost completely on free software and provides a very stable environment for corporate fixed line clients.

Cisco Routers, QoS, Qmail, Apache, PHP, FreeBSD, Debian GNU/Linux, Traffic Graphing, LDAP authentication systems.

I did consulting work for [Uninetwork](#), a Wireless ISP. I was involved in their initial network design and roll-out. I helped setup infrastructure such as backbone and BGP routing, VSAT link, QoS system, email and proxy servers.

I provided consulting services to an ISP in Mozambique in February 2003. We migrated their IP space, upgraded all their servers and moved to a Directory Services based management system. This included work on their dial hardware, firewalls, mail servers, VSAT equipment and datacenter cabling.

I helped design and build a comprehensive directory based (LDAP) ISP network management system called the [Frogfoot Portal](#).

- *May 2001 to Current* :: [Blio Corporation](#)

Cape Town : Co-Founder, Director

Formed an Embedded Systems Company called the Blio Corporation which develops network appliances, wireless network management systems, QoS systems and Voice over IP products.

Designed the logo and developed the brand and corporate identity. Designed the coded the web based configuration interfaces for the product range. Apache, PHP, XHTML and CSS. Software development for Wireless CPE, Voice Logger and PBX. Gained skills with Documentation Systems, Docbook-XML, Subversion and XML-FO rendering engines.

- *January 2004 to December 2004* :: [metaMera](#)

Cape Town : Co-Founder, Managing Director

Metamera produced a range of health and nutritional supplements. I created the brand and did most of the design work. I formulated the business and marketing strategy and managed the production and container design process. The venture never managed to acquire funding needed for marketing.

Gained skills working with design tools on Apple hardware and OSX, Freehand, Photoshop and working with the printing industry.

Metamera is no longer operating.

- *June 2003 to Current* :: [Amobia Communications](#)

Cape Town : Co-Founder, Director

Joint venture providing Wireless Internet Access services. Primary role of network design and services architect. Designed corporate identity and branding.

VPN and X.509 Authentication systems. Wireless network planning and roll-out. OSPF, VRRP. Wide range of wireless LAN equipment. Mikrotik router OS. Web based portal and ISP Value Added Service management systems.

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- *May 2002 to December 2002* :: Sair GNU/Linux Training for [IT Intellect](#)  
Cape Town : Part Time Contract (Evenings)  
Lecturing GNU/Linux Training Courses with topics ranging from basic Unix philosophy to Security, Administration and Networking.
  - *November 2001 to May 2003* :: [saproperty.com](#)  
Cape Town : Full Time Employment as Senior Developer  
Employed by saproperty.com in a role ranging from architecture design, systems administrator, database administrator and developer to support and project management. The saproperty.com system is an XML, PKI-crypto B2B exchange for a web portal listing properties for the nine largest real estate agencies in South Africa, completely running on free software with an uptime of more than two years, serving an average of more than 10,000 page impressions a day.  
Extensive use of relational databases, XML, LDAP directory services, Public Key Cryptography encrypted eMail containing XML. PHP, Apache, PostgreSQL, OpenLDAP, Qmail-LDAP, PureFTPd, GnuPG, djbdns, Debian GNU/Linux, PKS PublicKey Server. Central authentication of services using LDAP for more than 7000 property agents.  
Use of high end server hardware with high availability features such as hot swap SCSI Raid sets and dual redundant power supply units.
  - *December 2000 to October 2001* :: [Independent Online, iol.co.za](#)  
Cape Town : Full Time Employment as Senior Developer  
Worked for the Independent News and Media group's IOL.co.za website, a news portal which at the time, shipped in excess of 10 GBytes of traffic a day or more than 10 million page impressions per month. Experience in being part of the team managing and building the content management systems and database back ends for this high load database driven web services environment.  
Primarily used FreeBSD, MySQL and PHP. Informix, Sun Microsystems Server Hardware.
  - *July 2000 to November 2000* :: Visoft  
Stellenbosch : Full Time Employment  
Worked as a Systems Administrator for a Java Development House. Experience with running and supporting Java technology. Managing eMail systems, firewalls, routers and source code repository.  
Debian GNU/Linux, FreeBSD, OpenBSD, Qmail, Exim, Apache, CVS
  - *January 2000 to March 2002* :: Linux Touch screen Kiosk Project  
Stellenbosch : Part Time Contracting  
Developed and built a Touch Screen Information Kiosk for a Hardware store to display inventory and price comparisons. The touch screen interfaced with a Pastel accounting back end for stock info and pricing.  
Debian GNU/Linux, Apache, PHP, MySQL, Touch screen Hardware
  - *December 1999 to June 2000* :: [E\\*Trade](#) Africa, ETS  
Stellenbosch : Full Time Employment  
Worked for a company building the E\*TRADE Africa Online Trading System as Unix Systems Administrator and DBA. Experience developing and supporting high availability systems with load balancing related to mission critical web applications. Gained knowledge of the JSE's trading system, news feeds and real time share price information systems.  
Debian GNU/Linux, OpenBSD, Apache, PHP, Perl, PostgreSQL, Exim, Sun Microsystems Server Hardware, SSL accelerator hardware, Cisco LocalDirector load balancing hardware.
  - *June 1998 to February 1999* :: [Chet Chemicals](#)  
Johannesburg, Kempton Park : Full Time Contract  
Gained a wide range of experience in a diverse IT environment ranging from development work, systems administration to end user support. System Administration of company Wide Area Network connecting four remote sites using, 3Com Routers. Developed an integrated Proof of Delivery Document Scanning and Achieving System.  
Debian GNU/Linux, Samba, Perl, HP-UX
-

- *November 1997 to February 1998* :: South African Department of Land Affairs  
Pretoria : Part Time Contract  
Worked as systems administrator and web developer.  
HTML, CGI, HP-Openview SNMP, Sun Microsystems Server Hardware

## 6.1 Professional Education

- 1996, 1997 :: [Iscor Mining Bursary Training](#)  
Ellisras Grootegeeluk Coal Mine  
Industrial Process Monitoring and Production Environment Modelling

## 7 Academic Background

### 7.1 Tertiary Education

I was awarded bursaries from Iscor Mining and the SA Air force to study Engineering. I chose the Iscor bursary and to study at [Stellenbosch University](#).

- 1999 :: B.Sc Computer Science, Stellenbosch University
- 1996 to 1998 :: B.Eng Industrial Engineering, Stellenbosch University

#### 7.1.1 Societies and Sport

- 1999 :: [Stellenbosch University Wine Culture Society](#)  
Committee Member, Organiser of the Wine of the Month Club
- March 1999 :: Became a licensed Amateur Radio (HAM) Operator
- 1996 to 1999 :: [Stellenbosch University Underwater Club](#)  
1997/1998 :: Committee Member, Secretary  
1996 to 1999 :: Maties Underwater Hockey 1st Team
- 1996 :: Stellenbosch University Residence, [Huis Marais](#)  
Sport Representative for the Swimming Team. Squash Team

### 7.2 School

- 1991-1995 :: Matric, [Menlo Park High School](#)  
Pretoria, Higher Grade, Afrikaans Medium
  - 1984-1990 :: Grade School, Pretoria East Grade School  
Pretoria, Afrikaans Medium
  - 1995 :: Supervisor of School Novell Netware Lan
  - 1995 :: Provincial Underwater Hockey Colours  
Northern Transvaal A Team
  - 1991 to 1995 :: Member of School First Swimming Team
  - 1993 to 1995 :: Member of School B Squash Team
-

School Subject	Symbol
Computer Science	A
English	B
Afrikaans	C
Mathematics	C
Applied Mathematics	C
Science	B
Accounting	C

Award Received	Year
Academic Colours	1991 to 1995
Swimming Colours	1991 to 1995

Table 1: Summary of School Awards

## 8 Free Software and Non-Profit Projects

I am a strong believer in the principles and values of Free Software. Basically the freedom and liberty of software and the people who use the software.

I've been running Unix on all my desktop machines for more than 9 years.

- August 2007 to Current :: [SchoolWAN](#)  
SchoolWAN connect schools in South Africa. I was one of the founders of the SchoolWAN project mostly due to Amobia's involvement with sponsoring wireless access.
- February 2007 to Current :: [GeekDinner](#)  
The Geek Dinner movement is a meeting place for people who mostly interact online using blogs and mailing lists. It is a social networking event promoting entrepreneurship and co-operation in the geeky community. I was one of the founders of the GeekDinner movement.
- November 2006 to Current :: [Wireless Access Provider Association](#)  
I am the co-chairman of the Wireless Access Provider Association (2008). WAPA is an industry body to self regulate the (outdoor) wireless networking industry with a code of conduct and manage frequency spectrum usage.
- 1996 to Current :: [Debian - The Universal Operating System](#)  
I have been a Debian GNU/Linux Developer since 2001. I admire Debian's pragmatic idealism, the scale of the project and its success in producing high quality software.
- 2000 to Current :: [Western Cape GNU/Linux User Group](#)  
I am a committee member of the Western Cape GNU/Linux User Group (CLUG) where I keep in touch with the local Free Software community and give occasional lectures at the group's meetings. For two years was in charge of the design and manufacture of the t-shirts sold by the group at the Cape Computer Fair.
- 2001 to 2003 :: [The Hub Peering Point Project](#)  
I was a co-founder of The Hub, a group of people that were working on a project in the interest of better Internet Traffic Exchange or Peering in Cape Town.
- 1997 to 1998 :: Stellenbosch GNU/Linux User Group  
Founding Member of the Stellenbosch LUG. We arranged a successful Linux installathon.

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## 9 Current Interests and Research

- Ubiquitous Wifi and nomadic VoIP
- LDAP, Directory Based Network Management Systems
- GIS and GPS Applications

## 10 Sport

- Advanced NAUI SCUBA Diver
- Mountain Biking
- Swimming, Running, Squash, Spinning

## 11 Hobbies

- Jazz Music, Reading, Movies, Cooking, Photography

## 12 References

- [Abraham Van Der Merwe](#)  
Co-founder Frogfoot Networks, Blio Corporation, Amobia Communications, Teraco  
<http://oasis.frogfoot.net/>  
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  - David Jarvis  
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