Andrew Potgieter

andrew.potgieter.work@gmail.com

DOB 15/02/1975

Citizenship Dutch & South African

Languages English

Profile Motivated and dynamic software developer with approximately 12 years experience mostly in the banking / payments domain. Excellent object orientated analysis and design. Good communicator, documenter and writer. Well developed training skills. Effective self starter and meticulous finishing skills. Attention to detail. Always seeking improvements and furthering knowledge.

Skills		
Languages	**Commercial :** Java (12 years), J2SE1.7, J2EE1.5, SQL, XML	
	Academic : Clojure (3 months), CUDA, C, OpenMP, R	
Databases	MySQL, Oracle, SQL Server 2000/5, HSQL	
Frameworks	Spring, Hibernate, JUnit, Log4j, Mokito, XStream, ForkJoin	
Software	Tomcat, Eclipse, SVN, ANT, Jenkins, Maven2, Liquibase	
Systems	Linux / Windows	
Domain	Parallel Programming, OOA/OOD, Design Patterns, UML, Payments (ISO8583, EMV, HSM), Agile (Scrum)	

Education

2010 – 2014   University of Cape Town

MSc I.T. (Coursework and Dissertation)

- Thesis Project: A Parallel Multidimensional Weighted Histogram Analysis Method.
- Tutored GPU courses (UCT). Lectured and tutored OpenMP (CHPC).

1993 – 1997   University of Cape Town

B.Sc. Electrical Engineering

Thesis Project: Development of a voice controlled robotic arm.

Experience

May/2011 – Feb/2013   PayU   Cape Town

Team lead, Senior Developer, Analyst

Worked with the rapidly growing development centre of PayU, South Africa's leading online payment service provider, a member of the Naspers Group. Developed SOAP based Payment API's and web redirect services for card and alternate payment methods, and the profile website backing up the user base. Headed up a team to analyse, architect and build a multiple payments system (PayU & SafeShop, Traderoot, Postilion) dynamic administration portal and an external treasury integration system.

| Feb/2010 – April/2011 | Intec Telecom Systems | Cape Town |

Java Developer

Part of a team developing an Optimized Routing Application which assists telephone switch engineers in generating code for programming switches. Supported switches being Ericsson, Siemens and Nortel. The application was based on Oracle with a Swing front end and a custom Java scheduling engine running on Windows and AIX.

Completed the design and creation of a distributed installer package in ANT which automatically installed and updated the application and database across multiple machines.

| May/2006 – July/2009 | Postilion International | Cape Town |

Java Developer & Trainer

I worked for Postilion International, developing training/testing tools and delivering user training and software development courses to our various international clients. I was responsible for the development and delivery of the Postilion Realtime SDK course, the Postilion Office SDK course and the Postilion Transaction Security and EMV (Chip & PIN) course. The tools were Java applications used in training and testing environments, the most notable of which was a simulation of the Thales RG7000/8000 Host Security Module, the industry standard for EFT Security. Others included VM configuration utilities and ISO8583 transaction generation tools.

| Oct/2005 – April/2006 | Code Collective | Cape Town |

Java Developer

Developed a simple framework for the rapid creation of custom XML document editors in the form of Swing GUI's deployed over JWS. The menu for each UI was configured and built at runtime from an XML document as were the Swing Components and their XPath coupling to the elements in the XML data.

| Jan/2003 – Oct/2005 | Sabbatical |

Mostly volunteer work on organic farms (wwoof). Travel.

| Apr/2002 – Oct/2002 | Backstream Ltd | Amsterdam |

Java Developer

Worked in a team of 6 core developers on the Backstream content management and digital delivery platform where I wrote some core modules which could be plugged into the platform.

Designed and implemented two project specific interfaces to the platform. One a simple web site management user interface for Debitel, a mobile phone retail company, the other, a very large, rich front end Swing application for Veronica, the producer of Holland's TV magazine linking to their own version of IMDB and a Quark plug-in which generated the magazine pages and managed versions.

| Oct/2000 – Dec/2001 | Commerzbank Securities Research | London |

Java Analyst Programmer

Worked for the Portfolio Risk Advisory Group (PRAG) development team which is part of Commerzbank's Quantitative Research department. Extel rated PRAG as the top quantitative team. The development team was responsible for analysis, design, development and implementation of a distributed portfolio risk analysis and management capability. The system was built on an ASP (Application Service Provider) model and hosted a range of discrete products for both fixed income and equities.

The client side applications (i.e. Equity Portfolio Analyser and Fixed Income cash flow analyser) consisted of a Swing interface built on top of a hybrid spreadsheet / database engine, delivered online by JavaWebStart technology. The clients main features were complex data presentation, graphs, spreadsheet tables, HTML based reports, local market data source connectivity (namely Bloomberg), and execution of server side analysis and simulations.

The following technologies where employed: SSL and Certificates for the basic security; an LDAP server for the security, authorization and personalization; MQ Series for the distributed analysis and simulation service. All the software was developed in Java using Servlets, JSPs, JMS and JNDI.

XML was used extensively throughout the system in both the client and the server for application level protocols, dynamic application personalization and general configuration. The key XML technologies employed were SAX, DOM and Xerces.

| Mar/2000 – Jul/2000 | Deutsche Bank | London |

Java Developer

Designed, implemented and deployed a rich spreadsheet-like Java Swing time-sheet Applet using the MVC model and Java Beans data structures. It allowed employee's to enter their time worked on certain area of certain projects. Data was transferred from the web server in an XML format over http, and was parsed on the client side. Server side work was done using ASP and SQL Server 7.0 stored procedures.

| 1998 – 2000 | Integral Knowledge Utilization | Amsterdam |

Software Engineer

Worked on, and contributed to, an award winning open source AI project, ALICE. Wrote a Java client server based Applet and application which interfaces with ALICE and also added to the source code to implement new AIML definitions, plug-in-loader, plug-ins and client persistent information.

Implemented knowledge base data storage structure resembling LDAP and developed a Swing GUI front end. Designed plug-in for ALICE to search knowledge base giving results in natural language.

Designed and implemented a Global Transaction System Management Database for ABN-AMRO which tracked transaction routes and resolved conflicts in transaction system development. Oracle back-end and a Java Swing front-end interface.

Designed, developed and administrated a distributed database system for management of country specific business rules for ABN-AMRO Global Transaction System.