# **Richard Shephard's Resume**



# **Personal Details**

**Email** richard.shephard+profile@gmail.com

Location KwaZulu-Natal, Durban

Nationality South Africa Age 41 (03 Aug 1979)

# My Next Job

Area KwaZulu-Natal, Durban

Notice Period 30 days

# **Career Summary**

Company	Position	Duration
SA Home Loans	Technical Lead .Net Developer	Oct 2016 – Current
Altech UEC Technologies	Principal Engineer	Jan 2002 – Sept 2016
Self Employed	Web Developer	Dec 2009 – Jan 2011
University of Cape Town	Tutor	Mar 2001 – Nov 2001
University of Cape Town	Tutor	Mar 2000 – Nov 2000
Intrepid Software	Junior Developer	Dec 1999 – Feb 2001
NetActive Employees	Tutor/Teacher	Jun 1999 – Jul 1999

## Skills

## **Programming Language Skills**

- C#
- C & C++
- HTML5
- JavaScript (ES5/6) / Typescript (Web and Server (NodeJS))
- Python

### Soft-Skills

- Communication
- Team leading
- Tutor/Mentorship Technical leadership
- · Performance review, planning and assessment
- Self management with Product delivery awareness (timescales)

### **Other Skills**

- ASP.NET (Core and Framework)
- Docker / Containerization
- TDD / BDD
- Contributor to the NUnit OSS project
- Domain Driven Design
- Microsoft Project
- Linux (with embedded RT components)
- Embedded OS + RTOS
- Software Design via UML
- Basic computer literacy (e.g. MS Office, Google Docs, Libre Office)

#### **Architecture Notes**

- CQRS with Event Sourcing (Event driven systems)
- 12 Factor Applications
- Docker and containerisation (ASP Core and NodeJS)

## **Achievements**

2013	Employee of the Year (R&D)
2001	Graduated First Class Honours at University of Cape Town
2000	Dean's Merit List at University of Cape Town
1999	Dean's Merit List at University of Cape Town
1998	Dean's Merit List at University of Cape Town

## **Employment**

#### October 2016 - Current

### **Technical Lead .Net Developer (SA Home Loans)**

KwaZulu-Natal, Durban

Technical Specialist in Software Engineering

I am currently employed with SA Home Loans in the capacity of a Technical Lead developer. In this role I perform technical design decisions, code reviews and mentoring of junior developers. This is done at the team level as well as the organisational level. I participate in the design and decision making that forms the direction of the SAHL's overall software architecture.

As part of a team, I ensure the team follows good technical coding principles as well as code quality. This is achieved through code reviews, team feedback, pair/mob programming and mentoring. In conjunction with this I am able to code up infrastructure and business functionality.

I am involved in agile development methodology that progressively moves the company code base and architecture forward while maintaining the necessary product cadence on delivery of business features. In this, both the code base and the architecture are iteratively brought into line with software standards. In development of business features we ensure quality through TDD and BDD practices that ensure high level of software quality.

The majority of the development undertaken is in C#, with an increasing number of NodeJS services deployed as Docker Containers. We follow the Domain Driven Design to help our service orientated architecture to deliver value to the business. We develop REST API for our services in an API-first manner, while following the CQRS and Event Sourcing methodologies. Our architecture is almost fully event driven, while we utilise event coordination for business processes.

### Jan 2002 – September 2016 Principal Engineer (Altech UEC Technologies)

KwaZulu-Natal, Durban

Permanent Specialist position in the Electrical (Engineering) sector

At Altech UEC, after more than 14 years, I gained experience in coding for embedded devices (set top boxes) in C, C++, Python, HTML, JavaScript and Java, as well as writing a number of PC applications in C++, C# and occasional Python to interface with these devices. These applications were stand-alone applications for Windows.

My job role was quite varied. I was involved in 2 main areas - technical specialist and team leader. Depending on the project and the requirements thereof, this would dictate the position in the team. The majority of the time I was in the role of technical specialist.

As a team lead, I would be involved in defining project/task scope, estimation of project goals, deadlines and milestones. Once the preliminary project meetings and kick-off was completed, I would be involved in project task delivery and support of team members as well as support to non-team members on other projects (stakeholder management). I have been involved with many projects from inception (planning, stakeholder negotiation, etc.) phase to production and support phases. I have been part of key teams to produce time critical elements of the project to ensure project deadlines are kept. Often projects would span multiple teams with independent timelines. I would be involved in ensuring team delivery in these timelines.

As a team leader I have enjoyed the responsibility of liaising directly with relevant customer representatives in a planning capacity, project delivery and acceptance as well as to manage change requests from customers. With these projects, I am involved in strategic planning of project developments in terms of work breakdown, delegation, milestones, testing, product reviews before production and customer quality reporting. In order to accomplish this, I have had experience leading teams from 3 to 15 members both locally and with team's situated offsite (e.g. India and Australia). I have also led development groups where

up to 5 different smaller teams that needed to be tracked, helped and reported on to the project manager in order to complete the project within timescales. While involved in team leading activities I have also been required to be part of the development team, pushing code changes, code reviews, etc. Team coordination was done in both Waterfall and Agile methodologies.

As a technical specialist, I have worked on delivery of software architecture stacks which would be deployed across a number of embedded chipsets that required generic work. This was done in order to minimize the need of other teams to craft specific changes per chipset. The software architecture would have been from User Interface implementation (C++ and HTML/JavaScript) to low level drivers (Linux Kernel). In a more product centric team I would have ensured technical compliance to specifications through code reviews as well as coding specific architecture level frameworks to ensure team cadence.

In the past years of work, my experience has been in a variety of software and management disciplines. To list a few of these briefly:

- Designing PC and embedded software frameworks (architect role)
- Developing embedded software from specifications
- Developing PC software for interacting with embedded equipment
- Developing and maintaining (bug fixing) code written internally and by 3rd party developers, as well as integration of 3rd party libraries
- Managing teams (team leader) and Mentoring
- Developing embedded and PC test code
- Developing code for future R&D applications as well as demos to customers
- Hardware 'bring-up' debugging both hardware and software faults

Reason for Leaving: Company went into liquidation

Dec 2009- Jan 2011 Web Developer (Self Employed)

KwaZulu-Natal, Durban Contract fixed price after-hours work

Contract position in the Software (Information Technology) sector

During this time I had the opportunity to work after hours on web languages in order to improve my software skills. I did work for web sites rewriting the backend infrastructure. This work I took on to learn some of the new up coming and older web languages to better my knowledge.

The duties were to re-write most of the web backend functionality, re-code the SQL database tables and web frontend integration. The web languages/frameworks used:

- Ruby on Rails
- PHP
- SQL
- Joomla

This was an experience to skill myself in different languages from my full time job as these skills were not a focus of the business. In the latter part of my full time job at Altech UEC these skills were in demand and I was able to use the skills learnt to better aid the company in their strategic goals as well as use the skills to help and mentor junior team members.

Reason for Leaving: Contract completed

Mar 2001 – Nov 2001 Tutor (University of Cape Town)

Western Cape, Cape Town Basic Salary Plus Commission

Student / Graduate position in the Training (Education) sector

For the Department of Maths/Engineering at UCT, I was involved in tutoring the following courses:

• Fourier Analysis Foundation of Electrical Engineering.

Reason for Leaving: Graduated UCT

Mar 2000 – Nov 2000 Tutor (University of Cape Town)

Western Cape, Cape Town

Student / Graduate position in the Electrical (Engineering) sector

For the Computer Science Department at UCT, I tutored the following courses:

• Java to Computer Science 1.

Reason for Leaving: Did not have enough time to return as I was entering final year Electrical Engineering

Dec 1999– Feb 2001 Junior Developer (Intrepid Software)

Western Cape, Cape Town

Student / Graduate position in the Electrical (Engineering) sector

At Intrepid Software, I was given the following duties to perform:

- Developing software interfaces
- Developing multi-threaded connection code to external hardware via serial port
- Developing test code for a GUI
- Assisting in Quality review of code

Code development was done in C++ and ActiveX components.

Reason for Leaving: Contract completed

Jun 1999 – Jul 1999 Tutor Teacher (NetActive Employees)

Western Cape, Cape Town Basic Salary Plus Commission

Graduate position in the Networking (Information Technology) sector

At this time I had completed most of the computer science course. I received the opportunity to teach employees at NetActive, an ISP in Cape Town, Introduction to C++.

Reason for Leaving: Course finished and did not have time to continue to find new students

# Education

Dec 2001 BSc (Electrical Engineering)

**Honours at University Of Cape Town** 

Computer Science 1 (79%), Computer Science 2 (69%), Computer Science 3 (77%), Engineering 1 (83%), Engineering 2 (73%), Engineering 3 (77%), Engineering 4 (80%), Mathematics 1 (65%), Mathematics 2 (67%), Physics 1 (63%), Engineering Drawing (79%), Medical Engineering (80%).

All Courses in BSc (Elec Eng) as well as BSc (Computer Science), graduating With First Class Honours

Dec 1997 Senior Certificate

Grade 12 / Matric at Westerford High School (Secondary/High School)

English, Afrikaans, Mathematics, Science, Geography, Accounting

# Languages

Current

Afrikaans-Speak, Read, Write

English-Speak, Read, Write