Ricky Abell

Education

2009 **Bachelor of Science Honours in Computer Science**, *University Of KwaZulu-Natal*.
Degree awarded summa cum laude
Thesis topic: Towards Autonomous Soccer Playing Robots
Subjects: Image Processing & Computer Vision; Neural Networks; Simulation Modelling; Computer Graphics; Cryptography & Network Security; High Performance Computing

2006-2008 **Bachelor of Science in Computer Science and Information Technology (Computer Science Stream)**, *University Of KwaZulu-Natal*.
Degree awarded cum laude
Dean's Commendation(Aggregate > 80%) awarded for 4 semesters
Certificate of Merit(Top 15% of the class) awarded for 9 courses

Experience

2016–Present **Freelance Software Engineer**.
(January 2016 - Present) I've built various products for clients that include the following projects:
Found It - A .NET service that fetches and organizes data from websites so that users can search across all of them and get real time alerts on new listings. I refactored the service to make it easier to add and test new data sources and implemented new data sources.
InnateX - A native iOS app for Innate Motion that contains 4 games to help entrepreneurs understand themselves and their customers. Back end built on Node.js and PostgreSQL. *App Link* ***Travel Bookings*** - A travel website that provides VAT savings to users. Fixed bugs and added new features to the front and back end. Created technical designs for upcoming features. React; Redux; Node.js; CouchDB
Derivco - Reviewed and made improvements to the game engine and development pipeline.

2014–2015 **Senior Software Engineer**, *SMART Technologies*.
(November 2014 - December 2015) As a member of the real time services team I designed and built solutions for SMART Amp, a web based platform that enables teachers and students to collaborate in real time across computers and mobile devices. I maintained existing services; worked on the rewrite of the real time service; built data analysis tools and halved the time it took to run our automated tests. Worked with the following technologies: Java; Firebase; JavaScript; Python; Redis; MongoDB; InfluxDB; Robot Framework; Amazon Web Services.

2009–2014 **Senior Software Developer**, *Derivco*.
(August 2011 - October 2014) The mobile team create HTML5 solutions aimed at mobile devices. I'm one of three original members that designed and built our mobile HTML5 product from scratch which has grown into the largest department in the company. I was responsible for the architecture, design and development of the framework/platform our HTML5 casino games are built on. I also designed and built web services, databases, a lobby for presenting games and researched upcoming technology. Worked with the following technologies: JavaScript; HTML5/CSS3; React; C#; ASP .NET MVC; SQL Server; Gulp; WebGL.
(December 2009 - July 2011) Responsible for designing and developing software as a member of the Flash Core team. Flash Core's main product is a client and server framework that Flash casino games are built on. Worked with the following technologies: Flash AS1, AS2, AS3; PureMVC Framework; ASP .NET; JavaScript; C#

2007–2009	**Tutor**, *University of KwaZulu Natal*.

I was a tutor for the following courses at UKZN: ISTN100, ISTN102, COMP203, COMP300, COMP302, COMP301.

Responsibilities included: helping students with their practical work to ensure they understand the content; marking assignments and tests.

For the course, COMP 301 - Software Design, students were required to build a fully functional content management system using J2EE. I was a mentor to 3 groups of 5 students and gave them guidance with the design and implementation of their project.

Awards and Achievements

○ **Standard Bank IT Challenge** - 1st place regional round, 4th place national finals, 2009

○ **ACM ICPC** - 2nd place at UKZN, 2007; 1st place at UZKN and 5th in South Africa, 2008

○ **2cana Programming Contest** - 1st place, 2008 & 2009

Public Speaking

I have presented the following talks

○ **Understanding HTML5** - Brown Bag Session at Derivco, March 30 2012 (1 session - 65 people)

○ **Web Components: The Future of Web Development** - Brown Bag Session at Derivco, 22 November 2013 (2 sessions - 65 people each)