

Experienced technical engineer, with recent doctorate, looking for an exciting role in a highly skilled team that build products to positively change the world. With over 15 years' experience in systems architecture, full-stack development, data science & analytics and infrastructure automation. An effective communicator and team leader with proven problem-solving abilities across in a wide range of technologies and industries, with successful project implementation across the globe.

Education

2015 (current) Aston University – PhD Computer Science

- Thesis title: 'Synergies between reinforcement learning and evolutionary dynamic optimisation'.
- Extended the Open AI Gym framework with new evolutionary problem environments for the *moving peaks benchmark* and introduced a new *double mountain car* problem. Implemented evolutionary algorithms to solve the cart-pole reinforcement learning benchmark and the additional evolutionary environments.
- Published 2 conference papers and have 2 journal papers under review
- 2018 EAS Postgraduate Conference organising committee
- 2017 Student representative on the EAS school research committee.
- 2016 – University Colours for founding of the AstonHack event
- 2015 – 2019 Teaching assistant and demonstrator for the Operating Systems and Advanced Databases modules.

2012 – 2015 Aston University – BSc (Hons) Computer Science

- 2015 SU colours for contributions to the Computer Science Society
- 2015 SU colours for contributions to the Mature Students Society
- 2014 placed 2nd in the UK in the CapGemini SuperTechies Competition
- 2014 Team leader for Atos IT Challenge – reached top 10 global finals.
- 2013 British Computing Science award for best 1st year Computing Student at Aston
- 2013-15 Awarded EAS International Undergraduate Scholarship

Personal Achievements

- 2012 – 2016 yearly improvement on race time for the Birmingham Great Run ½ marathon
- 2012 English Bridge Union Grand Master (Warwickshire)

Professional Experience

Contract Roles

Various contract roles in Southern Africa and the UK spanning the full SDLC including pre-sales requirements analysis, technical mentorship, software development and application architecture with successful project delivery for several different organisations including: First National Bank, The National Gambling Board of South Africa, Outsurance, Nedbank, Investec, Computerweek SA, Route Gaming Solutions, Rand Merchant Bank and South African Airways.

I am currently working part-time for Aston Active Software Engineering. A chronological work history is available on request.

Technical Specialist

Developed and maintained BPM systems for the Asset Financing division. Integration project with loan originators earned team 'Most Improved Team Award' in the Retail Banking division.

Pinewood Technologies PLC

2005 – 2007

Project Architect

Promoted to technical team leader of the Contract Hire module. Nominated for Best Improver for the Pendragon Top Gun for 2007.

IO Core Pty

1998 – 1999

Technical Team Leader

Successful development and implementation of the WebTrade Internet Share Trading Application into several leading banks and brokerages in South Africa, including a site which won the South African Business Day "Site of the year" award in 1999.

Software development (SQL)

- Architected and developed database structures and procedures for financial processing for the CEMS, a monitoring system for the National Gambling Board in South Africa. Challenges included having the system certified by the National Bureau of Standards migration to Microsoft SQL Server 2005. There have been no reported bugs against this code since implementation in 2004.
- Developed WebTrade, a data-centric online share broking application customized and implemented by financial services organizations to allow customers online access to their portfolios. A WebTrade implementation won the South African Business Day "Site of the year" award in 1999.
- Developed Contract Hire module for Pendragon Plc. Promoted to Project Architect responsible for the development and architecture of this module within the hosted application.

Software development (Programming languages)

- Successfully developed and implemented a service layer for integration projects for the loans processing division with insurance providers, GIS data, the South African Deeds Office, loan originators and deeds registration using a web services for access to the loans processing system. 3rd party integration reduced average loans processing times by almost 50% at First National Bank.
- Developed and implemented service layer for loans originators for vehicle applications using IBM WebSphere, EJB and an Oracle database server. My team won 'Most Improved' in Retail Banking at Nedbank for the successful implementation of this project.
- Upgraded development and production platforms for The Yellow Pages in South Africa to Apache OpenEJB with Tomcat using an Oracle database. All upgrades were successful and met the project deadlines.

Personal Qualities

- **Organisation:** responsible for producing protocol documentation and supporting and coordinating machine manufacturer implementations of the protocols for the CEMS project. Worked with 6 different machines manufacturers. All machines were certified by the Standards Bureau for adherence to the protocol.
- **Leadership:** Part of the interview team for Pinewood PLC and responsible for technical skills development within the Contract Hire team. The entire team reported personal development exceeded expectation with the annual department review in 2006.
- **Commercial awareness:** produced technical requirements for the RFP's for 3rd party vendors while at FNB. Part of the bid evaluation team on submitted proposals.

Career History

Contract developer roles

2000 – date

Additional Skills

Interests & Achievements

Skills

Education /Training

Aston University 2012 (current) BSC Computing Science (Final Year)

1st year: 87% 2nd year: 80%

- Awarded an EAS International Undergraduate Scholarship for 2013/14/15 academic years
- BCS award for best 1st year Computing Student at Aston

Industry Certifications 2005 - 2010

- TIBCO iProcess BPM Modelling and Engine Management. (TBOs-108)
- Implementing a Database Design on Microsoft SQL Server 2000 (70-229)
- Developing XML Web Services and Server Components with Microsoft Visual C#.NET (70-320)
- (other expired certifications)

Personal Achievements

- Development team leader - Aston Computer Science Society. Union ½ colours 2013
- Information Officer for Aston Mature Students Society. Union ½ colours 2013
- 2nd in the UK for the CapGemini SuperTechies Competition 2014.
- Team leader for Atos IT Challenge 2014 reaching the global finals.
- Completed Birmingham Great Run ½ marathon in 2012, 2013, 2014
- Recognised as Grand Master in Warwickshire by the EBU in 2012