## Michael Hall

SOFTWARE DEVELOPER

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#### Profile

- Over 15 years of industry experience.
- I'm a quick developer. I've earned a reputation for finishing requirements rapidly and have been entrusted with doing time critical work.
- I have an eye for details, finding and fixing obscure bugs
- I adapt to new technologies, I have taught myself new skills when necessary or out of interest.
- I am most skilled at working in the .NET environment and the C# language, I have exposure to other languages, notably Visual C++
- I prefer working on back end systems, to front end or full stack work
- I have no problems working within a group, I contribute to discussions, make observations, and do code reviews.
- I have little problem doing presentations and demos. I have also conducted remote assistance with overseas clients.
- I'm a self-starter, working on ways to improve or refactor the system when time permits.

#### Education

#### Nelson Mandela Metropolitan University, Port Elizabeth

Bachelor of Technology: Information Technology (Cum Laude) (Technical Applications)

National Diploma: Information Technology (Cum Laude) (Technical Applications)

#### Skills

Skill	Competency	Years
General		
C# .NET	Daily	15
Microsoft SQL Server & T-SQL	Extensive	13
MongoDB	Daily	7
Microsoft Visual Studio	Daily	15
ORM Tools (SQLite, Entity Framework, Dapper)	Extensive	13
Source Control (Subversion, GIT, TFS)	Daily	12
Profiling and Memory Leak Detection	Experience	7
Unit testing	Daily	10
SCRUM development	Daily	15
Messaging (Kafka, RabbitMQ)	Daily	7
Microsoft Azure	Daily	2
Web Developn	nent	
ASP.NET MVC	Previous	5
HTML 5 with Bootstrap, CSS, LESS	Previous	5
Javascript & jQuery	Previous	5
.NET Web Services and Windows Communication Foundation (WCF) SOAP and REST services	Previous	8
Internet Information Services (IIS)	Previous	8
Other		

Computer Vision (OpenCV), Akka.NET, Unity

### Previous Work

#### Digital Outsource Services (Dec 2016 - Current)

- http://digioutsource.com/
- Senior Software Developer (Dec 2016- Jan 2019)
- Lead Developer (Feb 2019 Feb 2020)
- Technical Lead (Mar 2020 Nov 2020)
- Senior Software Developer (Dec 2019 Current)

#### Property24 (Jul 2015 - Nov 2016)

- www.property24.com
- Senior Software Engineer

#### Korbitec (Pty) Ltd. (Jan 2008 - Jun 2015)

- www.korbitec.com
- Software Engineer to Senior Software Engineer

#### Nelson Mandela Metropolitan University (2007)

- www.nmmu.ac.za
- Contract work, 1 year period
- Research Assistant for Johan van Niekerk

## Work Experience

#### Platforms - Digital Outsource Services (2016 - Current)

- http://digioutsource.com/
- Back end system for online casino
- Technology: C#, MongoDB, RabbitMQ, SQL Server, AKKA.NET, Kafka, Microsoft Azure
- Worked on a backend system which used Complex Event Processing to react to player experience in an online casino. Responsibilities included developing the backend application, doing code reviews and providing standby assistance as well.
- Created a backend system used by multiple teams to track events and create a trigger event when a trigger's conditions are met.
- As Lead Developer, responsible for designing and implementing rewrite of the system as well as investigating and implementing new technology like Kafka.
- As Technical Lead, responsible for assisting developers in their planning and execution of sprint work, as well as setting standards.
- Assisted various teams with creating solutions based on time critical regulated market requirements when they didn't have capacity or knowledge, and then a handover to the team taking responsibility for the solution.
- Worked on migration to Microsoft Azure and SalesForce.
  Using Function Apps, Event Hubs, Azure SQL, CosmosDB,
  Blob Storage, and Azure Data Factory.

#### Property24 - Property24 (2014 - 2016)

- http://www.property24.com
- South African property portal
- Technology: C#, SQL Server, ASP.NET MVC, Windows 8 Universal App, Bootstrap, JQuery
- Initial responsibilities were to work alone on projects out of scope of Property24 team, which include a tool to group similar property listings, a Property24 Windows 8 Universal App and migrating to Bootstrap 3. Later integrated into Property24 team where responsibilities were to assist in development and maintenance of new features.

#### Domofond - Korbitec (2013 - 2014)

- http://www.domofond.ru/
- Russian version of South Africa's Property24.com, a property portal.
- Technology: C#, Microsoft Azure, SQL Server, ASP.NET
  MVC
- Put in a small team with responsibilities to create a base for new Domofond portal based on Property24 code. Major differences between Russian and South African property markets meant a whole new system was required with a high pressure deadline of a few months. Finished site as required and continued with maintenance efforts until team size increased for new features.

#### PropCtrl - Korbitec (2010 - 2013)

- http://takethelead.propctrl.com/
- Application for capturing property information by estate agents, and uploading listing to Property24, and other property portals.
- Technology: C#, Windows Forms, WCF, SQL Server
- Responsibilities were mainly to assist in development of the product. Was moved to reporting branch of project, where I helped improve reporting experience and performance greatly. I also interacted with PropCtrl Mobile developers in providing a WCF web service that was used by the client apps. Prototyped an improved security system which was implemented. Also wrote tools to detect memory leaks.

#### Automated Civil Litigation 3 - Korbitec (2008 - 2010)

- http://www.korbitec.ca
- C# application that automates the process of generating court documents.
- Technology: C#, Windows Forms, SQL Server
- Responsibilities were to assist in the development the product, and provide support and assistance to the Canadian office.

# University Projects

#### ScriptBots.NET - NMMU (2007)

- A C# programming game that allowed programmers to change code that controlled an AI player in real time.
- This was made possible by CodeDom and reflection.
- The project used a 3D graphics engine (Irrlicht.NET).
- Worked alone.
- Entered into Microsoft Project Firefly 2007 (Software design category)

#### Robotics Project 2006 - NMMU (2006)

- A C# WPF user interface to interact with a robotic car.
- Used beta technology at the time (WPF).

- Was responsible for the user interface itself.
- Worked in a team of 3 people.
- Entered into Microsoft Project Firefly 2006 (Software design category)

## Notable Sideline Projects

#### DumbBots - Sideline project (2019 - Current)

- A rewrite of DumbBots.NET sold on Steam
- Coding game for to teach beginners programming principles
- Written in C# using Unity Engine

#### Cosmic Leap - Sideline project (2015 - 2016)

- A game about jumping from planet to planet, avoiding obstacles sold on Steam
- Written in C# using Unity Engine
- Voted to appear on Steam online game store via Steam Greenlight.

#### TubeStar - Sideline project (2013 - 2016)

- A game that simulates running a YouTube channel.
- Available for Windows desktop and Android devices
- Over 750,000 downloads. Translated into 14 Languages.
  Website allows users to submit translations.
- Decommissioned

#### DumbBots.NET - Sideline project (2012)

- An open source re-release of BTech project, ScriptBots.NET.
- Improved with four years of extra experience, achieved goals previously dropped for scope reasons.
- Featured on the Coding4Fun blog (9 May 2012).
- Chosen as a pick of the week on "This Week on Channel 9" (18 May 2012).

#### **Awards**

- Merit award for academic excellence (2004)
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- Merit award for distinction in project (2006)
- National Finalist in Microsoft Project Firefly Cup, Software Design category (2006)
- Diploma received Cum Laude (2006)
- Merit award for distinction in project (2007)
- National Finalist in Microsoft Project Firefly Cup, Software Design category (2007)
- Bachelor's degree received Cum Laude (2007)
- Sideline project, DumbBots.NET, chosen as pick of the week on "This Week on Channel 9" (2012)
- Winner Digital Outsource Services Data Science

competition for OCR (2018)

• "The Problem Solver" – Team award (2018)

• "The Magician" - Team award (2019)

Personal Date of birth 10 September 1984

EE/AA Status White Male

Nationality South African

Marital Status Single

Driving License South African, Code: B, Vehicle

Restrictions: 0