

Keletso Alex Botsalano

EXPERIENCED SOFTWARE DEVELOPER

P.O. Box 881AAD, Gaborone, Botswana

☎ +267 75950601 | ✉ kabotsalano@gmail.com | 🏠 <https://keletsobotsalano.github.io/> | 📱 KeletsoBotsalano | 🌐 keletso-a-botsalano-01784475

SUMMARY

I am a self-motivated, innovative experienced Software Developer with knowledge of developing primarily ASP.NET (Core) applications. I love writing code, designing and building complex enterprise applications that are robust, horizontally-scalable, fast and secure. I am also experienced in multiple programming languages, technology stacks, server operating systems, web and app servers. Furthermore, I love playing around with technologies I haven't used before.

WORK EXPERIENCE

Botswana Unified Revenue Service

Gaborone, Botswana

PROGRAMMER

October 2019 - Present

- Back-end software development of multiple tax modules including VAT, PAYE, OWHT using Java/Spring framework. URL: <https://eservices.burs.org.bw/>
- Machine learning applied to tax applications using Python (Rasa library)
- Allowing integration to other systems via REST web services.
- Strong relational databases usage mostly using Oracle and MySQL.
- On-prem hosting of applications using load-balanced linux servers and reverse proxy using Apache web server.
- CI/CD pipelines to automate testing, building and deploying using Gitlab.

Botswana Post

Gaborone, Botswana

APPLICATIONS DEVELOPER

May 2017 - September 2019

- Software development of online and over-the-counter apps serving utility services including TV subscription payments, insurance premiums, electricity payments, road tax payments, etc using C#/ASP.NET framework. URL: <https://eservices.botswanapost.co.bw/Eservices/Home.aspx>
- Microservices strongly used to expose functionality to online web-app, mobile app and over-the-counter app.
- Relational database using SQL Server and MySQL using queries, triggers, sequences and stored procedures. ORMs like NHibernate and EntityFramework also used.
- Hosting of services on Azure and CI/CD pipelines from Azure DevOps.

Botswana Harvard AIDS Insitute Partnership

Gaborone, Botswana

SYSTEMS ANALYST/DEVELOPER

August 2016 - May 2017

- Development of web based applications used in capturing clinical research data (HIV studies) utilising the Django framework. Django uses Python as server-side code, and HTML, CSS and JQuery as client-side code.
- Development and deployment is done on MacOS and Linux servers (Ubuntu distribution).
- Agile methodology strongly followed.

Corporate Business Solutions Botswana

Gaborone, Botswana

TRAINEE PROGRAMMER

October 2015 - August 2016

- Assisting in building of ASP.NET MVC applications.
- Hosting on-prem applications on Windows servers on IIS.
- First level support on reported production issues

ACADEMIC BACKGROUND

University of Hertfordshire

Hertfordshire, United Kingdom

MSc COMPUTER SCIENCE (DISTINCTION)

September 2018 - September 2019

- Advanced Databases – relational model, relational algebra, relational calculus, SQL, normalisation, transactions management, query processing, distributed database systems, distributed concurrency control
- Web Scripting and Application Development - web applications using Node, Express, Angular, MongoDB; MVC architecture; third party services and APIs
- Software Engineering Practice and Experience - software engineering process models and methodologies, technical engineering practices, like version control tools, configuration management tools, code analysis (like program slicing), fault detection, verification techniques, quality engineering practices, like design and code reviews inspections, post mortems
- Mobile Standards, Interfaces and Applications - developing mobile apps: mobile HCI, privacy and security, location and context awareness, technological transparency vs pro-activity, mobile development platforms
- Contemporary Practices in Information Technology - UK legislation in computing, professional standards and codes, ethical decision-making, risk analysis
- MSc Project - Audio Compression Using C#/.NET - Achieving linear PCM, A-Law and mu-Law compression: investigating wave-forms and spectral analysis of both original and compressed signals using human participants and analytical methods

- C Programming – variables, primitive types, methods, conditional statements, loops, arrays, memory allocation.
- C# Programming – object orientated programming, data structures, algorithms, recursion, robust coding, lambda expressions.
- Software Development – software development life cycle, relational databases, mobile application development, multi-threaded applications.
- Digital Transmission - information theory, source coding, channel coding.
- Computer Architecture - memory/cache, kernel, interface and I/O, processor architecture (von Neumann or Harvard), computer arithmetic and ALU, low level programming, performance.

CERTIFICATIONS

- 2019 **Microsoft Certified Solutions Developer**, App Builder
- 2019 **Microsoft Certified Solutions Associate**, Web Applications (Charter Member)
- 2018 **Microsoft Certified Professional**, Programming in C#

SKILLS

Programming	C#, Java, JavaScript, Python, SQL
IDEs	Visual Studio, Visual Studio Code, IntelliJ
Back-end Frameworks	ASP.NET (Core), Spring, NodeJS
Front-End Frameworks	Angular, JQuery
Web Servers	IIS, Nginx, Apache
RDBMS	SQL Server, MySQL, Oracle
CI/CD	Azure DevOps, GitLab
Operating Systems	Windows, Ubuntu
Cloud Technology	Azure
Containerization	Docker
Communication Proficiency	Very good speaking, listening, reading and writing English ability.
Personal Attributes	Superb analytical, logical and problem solving skills; reliable team player; strong leadership skills.

REFERENCES

- Milton Johane** Software Development
True Lane Projects
milton@truelaneprojects.com
+267 75724065
- Leatile Selelo** Information and Technology
BotswanaPost
lselelo@botswanapost.co.bw
+267 72271787
- Fortune Bontsi** Programmes and Administration
BotswanaPost
fbontsi@botswanapost.co.bw
+267 77056958