

Christopher Alberts

SOFTWARE DEVELOPER · SOFTWARE ENGINEER

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Summary

Experienced Software Developer with 4+ years of professional experience working with Python, C++, JavaScript, HTML, CSS, ABAP, SQL, MYSQL and Systems Engineering. Good knowledge of REST API's and web services implementation concepts. Very familiar with test driven development and CI/CD practices. Well versed in Git and the principals of version control. Fluent in English and Afrikaans. Currently, in my final year of studying for a Bachelor of Computer Science at the University of London and holding another Bachelor's degree focused on Psychology and Political Science from Pearson Institute of higher education. Able to work 100% remote. **Dual citizenship, Dutch/South Africa.**

Work Experience

Collaborit Asset Management Engineering

Johannesburg, South Africa

SOFTWARE DEVELOPER - 3 YEARS

Jan. 2020 - NOW

I have been involved in several projects, utilising different technologies. Examples include Python Programs/scripts, Flask/Node.js API's, progressive webapps(HTML, Javascript and CSS), SAP Fiori UI5/ABAP apps and native SAP ABAP solutions.

In my current job, I worked on numerous python projects. This includes building Flasks back-end's, data analytics and visualization along with daily Python scripting to do everything from document conversion to printing automation. Python is by far the language I am most passionate about and most versed in. This is the language I use for many of my personal projects. All of which can be found on my GitHub profile(<https://github.com/christopherAlberts>).

When I first joined the company, I was responsible for building a chat app that had contact information stored in a Mongo database. I made use of Google's Firestore SDK/API to implement the chat functionality, and Zoom's SDK for the video calling feature.

The second progressive webapp I developed, involved scanning QR codes and again storing the info in a Mongo database. I've also had to build an asset tracker webapp, that utilized Google's Cloud Vision API to identify text. This app was used to identify part numbers and clock readings in the field and then post that data to an API which sends it to the database. Both of which I build/setup. I made use of Ionic, Cordova, Capacitor and Angular to build the aforementioned webapps as well as Node.js and Express to construct the API.

Following this I worked in a team to build a SAP Fiori UI5 app. This consisted of using Javascript, HTML and CSS to build the front end which then connected to a SAP backend via an O-DATA service. The backend was written in SAP's native ABAP language.

Most recently I've just finished another SAP ABAP solution. This solution pulls all the text elements out of any given package and then makes use of MS Azure's translation API to translate the text accordingly. The translated text is then uploaded to the original text elements. Resulting in a solution that can instantly translate any package.

NIL DATA SOUTH AFRICA

Johannesburg, South Africa

SYSTEM ENGINEER - 1 YEAR 3 MONTHS

Nov. 2018 - Des. 2019

I was part of the team of engineers that looked after Vodacom's Hosted Voice platform. This involved daily configuration of Cisco routers, switches and firewalls all done via Cisco's Custom CLI. My job entailed a great deal of problem solving and troubleshooting on a daily basis. I had also become quite accustomed to working with others in both remote groups and in person.

Education

University of London

BACHELOR OF SCIENCE IN COMPUTER SCIENCE - *Currently Studying*

Feb. 2020 - Nov. 2023

- **Completed Modules:** Introduction to Programming I, Introduction to Programming II, Numerical Mathematics, Discrete Mathematics, Algorithms and Data Structures I, Algorithms and Data Structures II, Web Development, Programming with Data, Object-oriented Programming, Computer Security, Graphics Programming, Fundamentals of Computer Science, How Computers Work

Pearson Institute of Higher Education

BACHELOR OF ARTS MASTERING IN PSYCHOLOGY AND POLITICAL SCIENCE

Feb. 2013 - Nov. 2017

- Registered Counselor with the Health Professions Counsel of South Africa (HPCSA)

Certifications

2019 **Cisco**, CCENT

Johannesburg

2019 **Comptia**, Network+

Johannesburg

2018 **Comptia**, A+

Johannesburg

Immensity - Encryption Function

PYTHON

An encryption function built on the same math used in mathematical constants like the Fibonacci sequence, the twin prime constant and the base of the natural logarithm, to name but a few.

(<https://github.com/christopherAlberts/immensity>)

Foreground-Recognition

JAVASCRIPT - HTML

This project utilise Computer Vision in order to do live Foreground-Recognition.

(<https://github.com/christopherAlberts/Foreground-Recognition>)

NLP Trading Bot

PYTHON

The idea behind this project was to make a crypto trading bot that conducts trades based on the media's perception of that currency at a given time period.

The core of this project and purpose does not lie in the bot's trading ability but rather it's ability to gage the media's opinion of the currency in question at a given time. To do this I made use of Natural language processing. Natural language processing (NLP) is a subfield of linguistics, computer science, and artificial intelligence concerned with the interactions between computers and human language, in particular how to program computers to process and analyze large amounts of natural language data.

This was performed on individual news articles every day. These scores were then compiled together to produce an average daily NLP score that can be mapped to the particular cryptocurrency's daily price.

(<https://github.com/christopherAlberts/NLP-Trading-Bot>)

Hermes - A message bot worthy of the gods!

PYTHON

This bot makes use of the Telegram API, it is however designed to work a bit unconventionally. The idea behind this bot was not to make a bot with a template reply, but rather one that that can interact with any programs or script on your computer.

(<https://github.com/christopherAlberts/Hermes>)

Camera - Raspberry Pi

PYTHON - RASPBERRY PI

I thought my grandfathers Kodak Brownie IV film camera could use a modern upgrade. Thanks to a Raspberry Pi Circuit Board and some Python code, I was able to build a HD Camera that can now take 12MP digital photos and videos.

(<https://github.com/christopherAlberts/Raspberry-Pi-Camera>)

Smart watch

C++ - ARDUINO

In my spare time I thought it could be a cool idea to build my own Smart Watch.

(<https://github.com/christopherAlberts/Smart-Watch>)

Otodecks - DJ Software

C++

Otodecks is a DJ program that I had to write for my OOP(Object-Oriented Programming) varsity modules. It allows one to edit and mix a variety of various sounds and songs together.

(<https://github.com/christopherAlberts/Otodecks-DJ-Software>)

Read all about it - Pogressive Web App

IONIC - ANGULAR - JAVASCRIPT - HTML

This project uses "THE NEWS API" to get all the top news stories. These news stories are then displayed in a card format in the pogressive web app.

(<https://github.com/christopherAlberts/Read-all-about-it-Pogressive-Web-App>)

Mooovie - Pogressive Web App

IONIC - ANGULAR - JAVASCRIPT - HTML

In this project I make use of "THE MOVIE DB" API and TMDB's API to display information about all the current Movies and Series recently released.

(<https://github.com/christopherAlberts/Mooovie-Pogressive-Web-App>)

Captains Log

PYTHON

An out of this world cool, lightweight, daily system logger! Find out what's really happening inside your system!
(<https://github.com/christopherAlberts/CaptainsLog>)

Instagram-Filter

JAVASCRIPT - HTML

This is a JavaScript program that plays around with the array of pixel values in a photo. Each pixel is changed according to a certain sequence or algorithm, resulting in a global filter being applied to the photo in question.
(<https://github.com/christopherAlberts/Instagram-Filter>)