

# Benjamin ARKO AFRASAH

## Senior Software Engineer

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## PROFESSIONAL SUMMARY

High-level software engineer with innovative and well designed models in the software development arena. Committed to meeting project milestones in a timely fashion. Loves architecting codebases and code optimizations.

## SKILLS

Programming Languages	Typescript, JavaScript, NodeJs, Python, Dart, HTML, CSS, Go, Java
Frameworks	React-Native, ReactJS, Flutter, ExpressJs, Apollo GraphQL, Flask, Java Android, NextJS, Django
Databases	MySQL, PostgreSQL, MongoDB, Redis, Firestore, Firebase Database, Datastore
APIs	GraphQL, Rest APIs
DevOps	Docker, Github CI, Gitlab CI, Bash Script
Programming Paradigms	Functional Programming, Object-oriented programming
Cloud Technologies	Google Cloud, Linode Virtual Private Server, Vultr Virtual Private Server, Digital Ocean
Message Brokers	RabbitMQ, Redis, Kafka
Prototyping tools	Adobe XD, Figma
Development tools	Visual Studio Code, IntelliJ Idea, Pycharm, Webstorm, Eclipse
Operating Systems	macOS, Ubuntu, Windows, Deepin, Linux Mint, Elementary OS, Kali

## PROFESSIONAL EXPERIENCE

July 2020  
May 2020

### Senior Software Systems Engineer, NYEOVA SYSTEMS, Parker, CO - USA

- Lead Engineer in modelling and implementing an application for online food delivery and shop management built with React-Native, ReactJS and Electron with over 200+ clients.
- Lead Engineer in modelling and implementing a contractor-based contact management system.
- Lead mobile frontend engineer.
- Architect and designed company's project codebases and models making it 95% easier to understand by developers and non-developers.
- Constructed a more efficient and easy-to-understand scalable codebases with a 40% increase in productivity.
- Designed and co-ordinated with teammates in setting up company's website and product's websites.
- Guided and supported 3 trainees in honing their skills.
- Created the developers workflow for a more efficient work environment.
- Architected company's servers on Linode and Google Cloud making deployment seamless with 0% human interaction.
- Provided time-saving and effective insights and feedback on company's workflows, projects and models, achieving a 56% reduction in preparation of the software.
- Converted RestAPI to super optimised GraphQL APIs with an average response time of 86ms for 27, 625 http requests by 50 virtual users all in span of 12min 30s.
- Setup company's payment gateways.

Typescript Javascript MySQL Redis ReactJS React-Native NextJS GraphQL RestAPIs Linode VPS  
Google Cloud Docker Nginx Netlify Bash Scripting Python Teams Visual Studio Code SCRUM

June 2020  
November 2020

### Senior Full-stack Developer, JLS TRADING Co., Charlotte, NC - USA

- Collaborated with teammates to work on an amazon-based Inventory management system which can handle over more than a million products.
- Integrated amazon advertising APIs into our systems.
- Influenced 2 trainees to improve and get promoted to full-time working developers.
- Came up with cost efficient algorithms which saved us 96.67% of the cost on Google cloud.
- Setup company's DevOps and cloud based systems making deployment seamless with 0% human interaction.

Typescript Javascript MySQL ReactJS RestAPIs Google Cloud Docker Bash Scripting Python Teams  
Visual Studio Code

October 2020  
September 2019


### Backend Developer, ASQU LLC, Ghana

- Assisted my colleague with the development and maintenance of SchoolDesk.
- Developed the backend for an asset management system.
- Implemented an examination room assignment system for KNUST with over more than 40,000 students.

Typescript Javascript MySQL Slack ReactJS React-Native Python Flask Pycharm Visual Studio Code

September 2020	Teaching Assistant   National Service Secretariat, KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, Ghana
September 2019	<ul style="list-style-type: none"> <li>Assisted lecturers in the following courses; C programming, Classical Control Systems, Software Engineering 1 and 2, Basic Electronics.</li> <li>Marking quizzes, lab reports, assignments and preparing continuous assessment for students.</li> <li>Organised tutorial sessions to help students have a deeper understanding of the course.</li> </ul> Typescript Javascript Python Flask MySQL ReactJS React-Native Pycharm Visual Studio Code Slack
December 2019 March 2019	<b>Freelance Full-stack Developer , MITWORKS, Ghana</b> <ul style="list-style-type: none"> <li>Implemented a full-stack mobile application, Votebook; A voting based mobile application.</li> </ul> Typescript Javascript React-Native NodeJS MySQL Visual Studio Code
January 2020 December 2019	<b>Freelance Full-stack Developer, REMOTECH LLC, Ghana</b> <ul style="list-style-type: none"> <li>Developed a full-stack mobile application, Automote; An IoT based mobile application for controlling the lightening system of homes, offices and street lights.</li> </ul> Typescript Javascript React-Native NodeJS MySQL Visual Studio Code
August 2019 January 2019	<b>Full-stack Developer, MILLENNIUM PROMISE ALLIANCE, Ghana</b> <ul style="list-style-type: none"> <li>Implemented the back-end service for a software called RDLS which helped midwives to contact laboratories and send samples to request a lab test.</li> <li>Developed the mobile app for cRDLS.</li> </ul> Typescript Javascript React-Native NodeJS MySQL Python Flask Visual Studio Code Pycharm
August 2018 June 2018	<b>Backend Developer   Intern, ASQII LLC, Ghana</b> <ul style="list-style-type: none"> <li>Conducted maintenance and code reviews on SchoolDesk application.</li> <li>Quality Assurance testing.</li> <li>Assisted the company in marketing the SchoolDesk Application to 20 different schools.</li> </ul> MySQL Python Flask Pycharm
August 2017 June 2017	<b>Backend Developer   Intern, APPATECH RESEARCH GHANA , Ghana</b> <ul style="list-style-type: none"> <li>Code maintenance and debugging.</li> <li>Worked together with my colleagues in resolving bugs and issues.</li> </ul> MySQL Python Django Pycharm

## EDUCATION

- BSc. Computer Engineering at Kwame Nkrumah University of Science and Technology  
 September 2015 – July 2019

## LANGUAGES

English ● ● ● ● ●  
Twi ● ● ● ● ○

## STRENGTHS

- Writing clean, high-quality, high-performance and maintainable code.
- Continually migrate solutions to newer technologies to stay up to date with industry best practices.
- Supporting other developers.
- Never hold back feedbacks to other co-workers on how to improve more effectively.
- Fun and friendly to work with.
- Backend specialist.
- Agile development and Scrum practices.

## HONORS AND AWARDS

2019	Summa Cum Laude of Computer Engineering Class of 2019 in KNUST
2018	Excellent and Best Student in Computer Engineering
2017	Excellent and Best Student in Computer Engineering
2015	Magna Cum Laude of Class of 2015 at Kumasi High School Science 3

## PROJECTS

### PIGEONULTRA

2020 - 2021

[Website](#) [Playstore](#) [AppStore](#) [Playstore - Driver's version](#) [AppStore - Driver's version](#)

PigeonUltra is a mobile and online product that delivers quality e-commerce essentials from restaurants, groceries, bakeries, marketplace shops, and pet-care services in Ghana, West Africa.

[Typescript](#) [Javascript](#) [NodeJS](#) [ReactJS](#) [Python](#) [Bash Scripting](#)

### OMNISCIO

2020 - 2021

[Website](#)

An amazon inventory management system.

[Typescript](#) [Javascript](#) [NodeJS](#) [ReactJS](#) [Python](#) [Bash Scripting](#)

### PROJECT BLACKBOOK

2020

[Playstore](#)

A contractor-based contact application for finding the right contractors for the right job.

[Dart](#) [Flutter](#) [Python](#) [Flask](#)

### SCHOOLDESK

2018 - 2020

[Website](#)

A school management software with accounting capabilities and timetable generation feature.

[Typescript](#) [Javascript](#) [React-Native](#) [NodeJS](#) [ReactJS](#) [Python](#) [Flask](#)

### iDoc

2019 - 2020

<https://idoc4u.com> [Playstore](#)

This project is to help clients to easily access and communicate with their doctors without the need of always going to the hospital. Project currently has 150+ clients and 10 doctors.

[Typescript](#) [Javascript](#) [React-Native](#) [NodeJS](#) [ReactJS](#)

### VOTEBOOK

2019 - 2020

[Playstore](#)

A generic voting based mobile application.

[Typescript](#) [Javascript](#) [React-Native](#) [NodeJS](#)

### AUTOMOTE

2019 - 2020

[Playstore](#)

An IoT based mobile application for controlling the lightening system of homes, offices and street lights effortlessly. This helped save 70% of the power consumed on the KNUST campus as power could be scheduled when to come on or off.

[Typescript](#) [Javascript](#) [React-Native](#) [NodeJS](#)

### PROJECT AQUANAUT

2018 - 2019

[github.com/aquanautpro/aquanaut-community](https://github.com/aquanautpro/aquanaut-community) [Final Year Project, KNUST](#)

A Data Analytics Platform and sensor node for leakage detection and management in water distribution networks.

[Typescript](#) [Javascript](#) [NodeJS](#) [ReactJS](#) [Python](#) [Flask](#)

### ERRANDA APP

2018 - 2019

[gitlab.com/ACESIV/back-end/errand-boy-main-backend](https://gitlab.com/ACESIV/back-end/errand-boy-main-backend) [Software Engineering II, KNUST](#)

This project presents a system that allows users post errands they want to be run so errand guys can bid and run the errands for a fee.

[Typescript](#) [Javascript](#) [Python](#) [Flask](#) [React-Native](#) [ReactJS](#)

### CODEFORME

2018

[github.com/Silvrash/codeForMe](https://github.com/Silvrash/codeForMe) [Artificial Intelligence Project, KNUST](#)

This project used AI to convert speech to python code. (Natural language to code platform using semantic parsing and artificial neural networks).

[Typescript](#) [Javascript](#) [ReactJS](#) [Python](#) [Tensorflow](#) [Flask](#)

### BOOKIT

2017

[gitlab.com/facta01/BookIT](https://gitlab.com/facta01/BookIT) [Software Engineering Project, KNUST](#)

This project helps students to book buses to convey them to their destinations during school breaks and vacations.

[Java Android](#) [Python](#) [Flask](#)

### EGG COLLECTOR

2017

[gitlab.com/benjin/egg-collector](https://gitlab.com/benjin/egg-collector) [Exchange Program Project, KNUST](#)

A computer vision-based project for egg detection and determining if an egg is viable or not, grouping the eggs into those which are good and the spoilt ones.

[Python](#) [Arduino](#)

## MovX

2016

 [gitlab.com/benjin/movx-android](https://gitlab.com/benjin/movx-android)  Personal Project

A mobile application for keeping track of movies, reading and viewing latest trends of manga.

Python

Java Android

Flask

## “ RÉFÉRENCES

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### Jephthah Yankey

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