ALEXANDROS "ALÉ" PHILIPPOS POUROULLIS

Software development enthusiast

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WORK

Software engineer

Loop

09/2022-Present

Contractual

- > Startup aiming to digitalize the minibus taxi industry in South Africa
- > Oversaw and developed all aspects of the software ecosystem during the initial stages of the project, including the server, database, pilots, bookings application, admin portal, affiliates portal and WhatsApp chatbot.
- > Spoke with stakeholders, including venture builders, investors, taxi drivers and customers to understand their needs and requirements.
- > Supervised two software interns.

Software developer

Elevat3d

苗

07/2022-Present

Part-time

- > SaaS platform that provides a suite of services for mines to analyze surface blasts and improve their blasting operations using machine learning and other techniques.
- > Responsible primarily for the user interface built in React with Typescript, which involves using a graphics rendering engine in the browser, as well as building the backend API using Python and FastAPI.

EDUCATION

Tertiary

University of Cape Town **BSc Computer Science and Applied Statistics**

2022-2024

Secondary School

Selborne College

2019-2021

COURSES

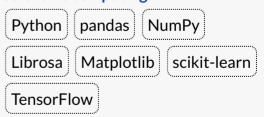
Mathematics for Machine Learning Specialization

Imperial College London

- > Linear Algebra
- > Multivariable Calculus

SKILLS

Scientific computing



Frontend



PROJECTS

Machine learning pipeline for type la supernova classification

Google Summer of Code evaluative task

- > Evaluative task for a <u>Google Summer of Code</u> <u>open-source project hosted by the Johns Hopkins</u> <u>University Applied Physics Laboratory.</u>
- > Created an end-to-end pipeline that estimated 5 different parameters using 5 individual models and aggregated the results

Speech emotion recognition

Loop Q Prize challenge A

- > Used librosa to extract spectrograms, melspectrograms, mel-frequency cepstral coefficients and global average features
- Used a variety of data augmentations methods including SpecAugment
- > Wrote a paper on the task

Student marketplace platform

In progress

- > Developing a marketplace platform geared directly towards students, localized to university campuses, where students can sell, exchange, or request items
- Creating a <u>RESTful API</u> in Java with Spring, deployed on AWS Elastic Beanstalk, using a MySQL database hosted on an AWS RDS instance, and S3 for storage
- > Frontend being built in Next.js, using Typescript
- > Using Firebase for user authentication
- > Set up a CICD pipeline using AWS CodePipeline

SKILLS CONTINUED

Backend

AWS GCP Firebase Express.js

RESTful APIs SQL

Relational DBs NoSQL DBs