

ALEXANDROS “ALÉ” PHILIPPOS POUROULLIS

Machine learning and software engineering enthusiast

✉ alexpouroullis123@gmail.com ☎ +27 71 540 8132 🔗 alexandros-pouroullis-a105051b6
🌐 AlePouroullis 🌐 alepouroullis.com



PROJECTS

Machine learning pipeline for type Ia supernova classification

[Google Summer of Code](#) evaluative task

- Evaluative task for a [Google Summer of Code open-source project hosted by the Johns Hopkins University Applied Physics Laboratory](#).
- 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, mel-spectrograms, 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 [RESTful API](#) in Express.js, deployed on AWS Elastic Beanstalk, using a MySQL database connected to an AWS RDS instance, and S3 for storage
- [Frontend](#) being built in Next.js, using Typescript
- Using Firebase for user authentication
- Set up a CI/CD pipeline using AWS CodePipeline

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

Python

pandas

NumPy

Librosa

Matplotlib

scikit-learn

TensorFlow

Javascript

Typescript

HTML

CSS

Sass

React

Redux

Next.js

AWS

Firebase

Express.js

RESTful APIs

SQL

Relational DBs

NoSQL DBs

WORK

• Software developer

Elevat3d

📅 07/2022-Present

Part-time

- SaaS offering a suite of services to mines, particularly related to mine blasting, using machine learning and drone photography
- Building the interface in React using Typescript and Redux

• Software developer

Loop

📅 09/2022-Present

Part-time

- Startup concerned with digitalizing the taxi industry in South Africa
- Managing all aspects regarding the technological ecosystem of the project, including database management, prototyping, software consulting, chatbots, writing scripts, etc.