

# 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](#).
- Visualised data using matplotlib
- Created a machine learning pipeline consisting of 5 different models for determining 5 different physical characteristics of the progenitor systems of type Ia supernovae given their observable parameters

### 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
- Wrote a paper on the task

### Crop yield prediction

[Loop\\_Q Prize](#) challenge B

- Explored, visualised and prepared data for training
- Trained and compared various models

## WORK

### Front-end developer

Elevat3d

📅 07/2022-Present

- Startup concerned with providing a variety of services to mines, particularly related to mine blasting, using machine learning and drone photography
- Part-time position as a software developer
- Building the interface in React

## 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

HTML

CSS

Sass

React

Redux

Next.js

C++

Java