# **BENEDICT VITAL**

certaintyprinciple@outlook.com

+447780287622

linkedin.com/in/benedictvitai github.com/certiprince kaggle.com/benivitai

#### EDUCATION

University College London - BSc Physics | 09/2019 - Present

- Predicted First based on Year one
- Key Modules:

Mathematical Methods (I, II & III) | Practical Physics and Computing | Data Analysis, Statistics and Numerical Methods | Quantum Physics | Statistical Mechanics

- Key Skills: Multivariate Calculus, Linear Algebra
- Societies: Active in Gospel Choir and Al Society

## EXPERIENCE

MyTutor.co.uk - Physics and Maths Tutor | 10/2019 - Present

- 5-star rating with over 250 lessons on platform
- Nominated for Best Confidence Builder 2020 award

CARP Las Vegas - Community Outreach Intern | 05/2019 - 07/2019

 Enhanced communication skills by liaising with over 100 non-profits in Las Vegas to spread awareness of activities aimed at self-development

STF Europe - Gap Year Programme | 10/2016 - 08/2017

- Developed long-term social projects in a team in Albania
- Self-funded activities by selling seasonal decorations in Switzerland, Austria and Germany. Pitched to ~50 groups/hr; personal daily record of 1200 CHF in sales in Zurich city centre.
- Taught myself basic French to pitch products in Romandy

## PERSONAL INTERESTS AND PROJECTS

## Singer-songwriter:

- Debut EP "Songs for a Friend" scheduled for summer 2021 release on all platforms. See Soundcloud for demo single
- Seasoned weekly busker in Central London prior to my studies - see Laceless Facebook

## Volunteering:

- Worship Director for my church in Croydon since 2018
- Active in youth charities, such as HARP UK and Brightside

#### PROGRAMMING SKILLS

**Experienced:** Python, Pandas,

Matplotlib, SQL, Git

Familiar: MATLAB, R, C++,

Mathematica

#### KEY PROJECTS

## **TFL Oyster Journeys Analysis:**

 Performed cleaning on a classmate's dataset and analysis of busiest stations and journey length with Pandas and Matplotlib

## **Predicting No-Shows in Hospitals:**

• Implemented and compared multiple ML algorithms using **Scikit-Learn**, including Logit and Decision Trees, to predict hospital no-shows with 80% accuracy

## **Trigger Word Detection Pipeline:**

 Built an end-to-end speech recognition pipeline using **Keras** and **numpy** to detect trigger words in home assistant devices and play a chime after each trigger word

## CERTIFICATIONS

## Machine Learning, Coursera.org

- Programmed algorithms in **MATLAB** such as multivariate linear regression, logit, SVMs and PCA from first principles; derived vectorised implementations to reduce runtime
- Built a movie recommender system based on collaborative filtering

## Python for DS and ML Bootcamp, Udemy

 Completed all projects in Python using Pandas, plotly and Tensorflow