Vivienne O'Brien

London, United Kingdom | vivienneobrienis@gmail.com | +353867338890
github.com/vivienneobrien | vivienneobrien.github.io | www.linkedin.com/in/vivienneobrien

EDUCATION

MSc Computer Science, Grade prediction: Distinction   **September 2019 - September 2020**
University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom
GPA: 4.25/5

BA (Joint Hons) Education & Design (Specialisation: Visual Communication), II.I   **September 2014 - June 2019**
National College of Art and Design, 100 Thomas St, The Liberties, Dublin, Ireland
From Jan 2018- Dec 2019 I was working full time as a Visual Arts & SPHE Post-Primary teacher-volunteer, teaching 200 students aged 12-18 a week from 9-4pm while balancing my studies and working part-time.
Teaching Portfolio: https://vivienneobrienis.wixsite.com/teachingportfolio
Suas Education Development Programme Volunteer– 3 months teaching Math & English in Kolkata, India.

SKILLS

- Backend: Java, Spring/ Spring Boot, Python, PostgreSQL, MySQL MongoDB & Mongo Express.
- Machine Learning: Tensorflow, Keras, Pandas, NumPy & Matplotlib.
- Front-end: React Native, Expo, React, HTML, CSS, Bootstrap & JavaScript.
- UX/UI Design: Adobe Indesign, Adobe Illustrator, Adobe After Effect, Adobe Photoshop, Adobe Lightroom & basics of Cinema 4D.
- Other: Git & Github.
.

WORK EXPERIENCE

Machine Learning Engineer   **Final Project**   **June - Current 2020**

- Investigating the impact of using word embedding representations of information related to COVID-19 on machine learning and deep learning models' ability to predict daily Foreign Exchange (forex) spot price fluctuations.
- Part 1: Using a Linear Regression model with a time series using macro-economic data and forex price to predict the forex price.
- Part 2: Using an LSTM model using COVID-19 death rates and forex price to predict the forex price.
- Part 3: Using a TF-IDF model using a COVID-19 news headlines and tweets dataset created using OpenBlender.
- Part 4: Inputting the outputs of TD-IDF model in Part 3 into the LSTM model created in Part 2 to predict the forex price.
- URL: https://github.com/vivienneobrien/final_project
- Technologies used: Google Colab, Jupyter Notebook, Python, Scikit-learn, Tensorflow, Pandas, Keras, Numpy & Matplotlib.

Co-Founder & Full Stack Developer   **Tattooder**   **May - Current 2020**

- This app matches users with tattoo artists. Our app is unique due to the tinder-like user interface provided.
- Carring out unit tests using Mockito that equates to an overall coverage of 20% of the applications current backend methods.
- Working in an Agile environment where the team meets for weekly Scrums to go over project updates and showcase demos for iterative feedback. This application should be deployed by the end of the summer using a docker image.
- React-Native and Expo Client are being used to create the front-end components.
- Spring/ Spring Boot Maven, MongoDB and Mongo Express are used to create a backend that stores user data.
- Adobe Suite is being used to maximise the user experience through prototyping and to create a brand identity for the product.

Full Stack Developer   **Arcadia**   **April - May 2020**

- "Arcadia" is a gaming platform where users can play multiple games and chat online.
- As part of a team of four, our first full-stack web application was developed in just under a month during the height of Covid-19.
- We built a snake, tetris and simon/e says game and improved performance by using multithreading and client-side sockets.
- This project was written using Java and a library called Swing to set up the GUI interface. A database was set up using PostGre SQL.
- Version control was carried out using Git in the command line. URL: https://github.com/vivienneobrien/Arcadia

Coding Mentor   **CoderDojo**   **September - November 2018**

- Broke down difficult concepts related to programming to 20 students from ages 6-18 from non-technological backgrounds.
- Mentored and inspired students through various projects to help them maintain a strategy to move forward and continue their programming adventure. Focused languages used: Scratch, HTML and CSS.

Graphic Designer   **The Rediscovery Centre**   **August 2018**

- Supported teams of 40 teenagers from the ages of 12-18 to create and design a sustainable product by giving branding and marketing presentations, adobe concept design tutorials and constructive feedback to help them bring their product to life.

AWARDS

The Union Survives   **Best British Book Design & Production Award Finalist 2019 (Student Category)**

- Project Output: A book which discusses how young people in Ireland define their gender identity.
- URL: https://vivienneobrien.github.io/theunionsuvives.html