AARON WARD

B.Sc in Computing

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Online Communities

GitHub
▬▬▬▬▬▬▬▬▬▬

www.github.com/AaronWard

LinkedIn
▬▬▬▬▬▬▬▬▬▬

www.linkedin.com/in/aaronjward/

Writing and Documentation —

- Microsoft Office
- Pandoc
- LaTeX/MikTex
- JavaDoc

Summary

Strong minded student with a love for software development. I am looking to work in a thriving and fast pace industry in which i'm able to prove my skills and attributes. I am always open to work hard, collaborate in a team and learn new skills from my mentors and co-workers.

Knowledge and Skills

- Java
- JavaScript & Node.Js
- Typescript
- Python
- PHP
- HTML & CSS

- JQuery and Angular
- Android Studio
- Networking
- API Development
- Database Design
- Design Patterns

- Artificial Intelligence
- Machine Learning
- TensorFlow
- Computer Vision
- Data Analytics
- Chat Bot Development

Project Experience

2017 - 2018

Convolutional Neural Networks for Image Recognition, Sentiment Analysis and Emotion Detection

Final year project

The main objective of the thesis project is achieving sentiment analysis by implementing a convolution neural network. Sentiment analysis (or emotion detection) is a technique of understanding the a person mood by analyzing facial characteristics through the use of **computer vision**.

- The AI is trained with a large number of images of human faces.
- The AI then learns how to classify the facial expressions and assign them to a certain emotion
- The trained TensorFlow model was deployed as an API service, classifies images that it has received and sends back the result.
- The web application uses Haar cascades for facial tracking and sends cropped images of users face to the model API.

The technologies involved in this project are the **TensorFlow** machine learning library, Node.js, Heroku PaaS and the Python programming language.

2016 - 2017

Chat Bot Development

Facebook

I have built a Facebook chat bot on the Messenger platform for my 3rd year project. This bot was designed, in a team using the **scrum** methodology, to help students on campus by assimilating a range of useful articles of information to one place. The bot consisted of the following features:

- Give real time bus information and college shuttle bus times.
- Display information about gym and library facilities.
- Allow students to log into student email/moodle.
- Reply to the user in a human-like manner.

The bot was developed as a Node.JS app hosted on the **Heroku** PaaS and was integrated to the Facebook Messenger platform. Three API's were developed for the bus, gym and library services in order to decentralize the application and reduce resource usage. **MongoDB** was also used to store information about the college facilities. Natural language processing was also utilised to extract context and semantics from the users input. For more information please visit my GitHub.

Education

2014 - 2018

B.Sc (Honours) in Computing - First Class Honours

Institute of Technology Blanchardstown

During the course of my degree I have learned about a wide range of skills and technologies. I have worked in teams using **Agile** development frameworks such as Scrum and have experience in project planning. Additionally, I have a strong background in feasibility and specification

report writing, system modeling with **UML** and software testing.

Upon completion of my degree, I obtained a first class honours with a GPA of 3.33.

2014 - 2014   **Certificate of Achievement in Programming**

CCT - College of Computer Training

This course consisted of training in core programming fundamentals in **C#** over the course of 4 weeks. Certificate number: TC14100