

# ARNAB TARWANI

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Recent Masters graduate from University College Dublin and have 6 months of experience in web development. Over the past year I've grown passion for data and machine learning with main focus on JavaScript, JQuery, HTML5/CSS3, VueJS, MySQL as a whole and am seeking JavaScript or Web Developer role.

## TECHNICAL SKILLS

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**Programming Languages:** Python, Java, C++

**Database Technologies:** MySQL, MongoDB

**Machine Learning, Data Analysis:** RapidMiner, Weka, Keras, Pandas, Numpy, Matplotlib, Plotly, Bokeh, Scikit-Learn, Seaborn, Tableau,

**Development tools:** VmWARE, Oracle VirtualBox, Microsoft Azure, AWS, XAMPP

**Web Frameworks:** Django, VueJS

**Scripting Languages:** D3.js, JavaScript, JQuery, HTML, CSS3, Bootstrap

**Operating Systems:** Linux, Windows, Android

## EDUCATION

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**MSc. Computer Science Negotiated Learning** **University College Dublin** **2018 - 2019**

**Final Year Project:** Identification of on-set of depression on Twitter data using NLP

**Technologies Used:** Python, Django, HTML/CSS/JavaScript, Bootstrap, D3JS, NLP, Sentistrength

**Modules:** JAVA Technologies, Information Visualisation, Data Programming with Python, Data Science in Python, Machine Learning, Text Analytics, Big Data Programming, Data Mining, Human Languages Technologies

**BE Computer Technology** **YCCE, India** **2013 - 2017**

**Achievements:** Graduated with First Class degree

**Final Year Project:** Campus Commune Navigation System

**Technologies Used:** Augmented Reality | **Softwares Used:** Unity3D, Android

**Modules:** Web Development, Artificial Intelligence, Pattern Recognition, Fuzzy Logic and Neural Networks, Data Structures, Design and Analysis of Algorithms, Object Oriented Programming

## COURSES/TRAINING

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**Machine Learning (Coursera.org)** **Stanford University** **August 2018**

**Achievements:** Completed the course with a percentile of 94.4%

## ACADEMIC PROJECTS

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**Identification of on-set of depression on Twitter data using NLP at UCD** **May 2019 – August 2019**

- Built a web application with a dashboard using Django as web framework to provide an interface for users to Register/Login, used SocialAuthDjango for authentication
- Created a trend line chart for the overall sentiment of the tweets and visualized the data using D3JS
- Designed an algorithm based on NLP approach to calculate the polarity of tweets based on the concepts of SentiStrength
- Conducted evaluations to validate the accuracy of the algorithm and provided descriptive analysis on the accuracy improvisations and overall execution of the project

**Technologies Used:** Python, Django, HTML/CSS/JavaScript, Bootstrap, D3JS, NLP, Sentistrength

### **Text Analysis on Yelp Reviews using Classification Algorithms at UCD**

**May 2019**

- Web scraped Yelp Reviews dataset based on 5 broad categories mainly automobiles, hotels, bars, food and Restaurants
- Performed text analysis on Yelp reviews data using Python and Scikit-Learn, increased the accuracy of the model by 94%

Technologies/Libraries Used: Python, Pandas, Scikit-Learn, BeautifulSoup, Matplotlib

### **Exploratory Analysis of TED Talks at UCD**

**March 2019**

- Analysed the data of TED Talks based on the transcripts
- Analysed using the concepts of data selection, data sampling, learner selection and data visualization

Technologies/Libraries Used: Python, Scikit-Learn, Pandas, Seaborn, Matplotlib

### **Channelling Hans at UCD**

**November 2018**

- Recreated the Gapminder tool using D3.JS, HTML, CSS, Bootstrap and JQuery
- The data used was based on GDP of 195 countries in the world for three years – 2015, 2016, 2017

Technologies/Libraries Used: HTML, CSS, D3JS, JQuery, Bootstrap

### **Sentiment Analysis on Women's Clothing Reviews at UCD**

**November 2018**

- Implemented a neural network model that was able to recognize three different human variations of emotions from text data of reviews provided by women in a clothing store using Python and Keras toolbox

Technologies/Libraries Used: Python, Keras, Scikit-Learn, Matplotlib

### **Calculating Body Fat Percentage using Genetic Algorithm at UCD**

**October 2018**

- Implemented a neural network to calculate the body fat percentage of a person based on features like weight, height, neck circumference, chest circumference, abdomen circumference and circumference of other body parts using Python packages such as **Pandas, Numpy, Matplotlib and Scikit-Learn**

## **INTERNSHIPS**

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### **Web Developer**

**Indian Chest Society**

**08/2017– 12/2017**

- Managed a team of 4 people from the development team and was also in-charge for giving weekly presentations to the management team relating to the amount of work done
- Used Django and Jinja2 frameworks to develop a backend environment for newly registered users
- Worked on technologies like HTML, CSS, JavaScript, Bootstrap and Wordpress for UI design

Technologies used: HTML, CSS, JavaScript, Bootstrap, Wordpress, JQuery

### **IT Intern**

**Veracity IT & Legal Services**

**05/2015– 07/2015**

- Completed training as a database administrator at the firm
- Worked with the technical team which was responsible for maintaining the technical requirements from clients records to the number of digital signatures issued
- Worked on MySQL and MongoDB for storing and extracting the data

Technologies used: MySQL, MongoDB, Shell Scripting

## **INTERESTS AND ACHIEVEMENTS**

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- Attended ethical hacking workshop organised in YCCE
- Appointed as a President of Shadow Teachers Association at YCCE
- Worked as a Technical Head in the event Webster organized at YCCE