



School of Computing

Year 4 Project Proposal Form

SECTION A

Project Title: Fake News Detector using Link Aggregator Sites

Student Name: David Talan

Student ID: 14387991

Stream: CASE4

Project Supervisor Name: Yvette Graham

[Note: It is the student's responsibility to ensure that the Supervisor accepts your project and this is only recognised once the Supervisor assigns herself/himself via the project dashboard. Project proposals without an assigned Supervisor will not be accepted for presentation to the Approval Panel.]

SECTION B

General area covered by the project

Machine Learning

Natural Language Processing

Data mining

Data Analytics

Web Application

Outline of the proposed project

- **Background - where the ideas came from**

The idea came from the recent rise in popularity of the term 'fake news', mainly due to Donald Trump. I also experienced it personally where I would read a title of a post i.e. from Reddit, upvoting it then heading over to the comment section to be told that the news was fake or misleading. M

- **Achievements - what functions it provides, who the users will be**

The end product of the project will be a chrome extension that will flag the news article/link that a user is planning on viewing with a label to tell them it's fake/contains false information. I also plan on implementing a rating system, letting them know if the website the article is coming from is a reliable source or not. The users will be anyone who frequents the internet and use it as a source of news.

- **Justification - why/when/where/how it will be useful:**

I think this will be very useful any time anyone is looking for information about a certain topic. This is especially crucial if they're trying to fact check something that they heard from someone/somewhere. It also prevents people from being exposed to propaganda and be influenced by sensationalism to let them create their own opinion. I think it will be very useful come events like an election, so that a person's opinion won't be swayed by a factually inaccurate article that they might have read somewhere online.

- **Programming language(s) –**

Python, Javascript, HTML, CSS, SQL

- **Programming tools / Tech stack Learning Challenges - List the main new things (technologies, languages, tools, etc.) that you will have to learn:**

- The biggest learning challenge will be Machine Learning, Natural Language Processing and Data Mining. NLP wasn't a topic that was focused on in the course so learning how it works would be a challenge.
- Data Mining is a module this year so learning all those techniques on how to manage the data I need will really be helpful as I know there will be a lot of data to be handled.
- Learning how to use tools such as the Reddit API to get all the comments I need, or Python NLTK for the NLP aspects of the project.
- Learning how to use SQL again as it was a module for one semester in 2nd year.

- **Hardware / software platform - State the hardware and software platform for development
Special hardware / software requirements - Describe any special requirements:**

No special hardware needed. Just a computer needed