

# CATHAL O'CALLAGHAN

2nd Year Computer Science & Information Technology Student

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## PERSONAL PROJECTS

### News article web scraper

#### Python / Go

- Wrote a scraper to gather news articles from a handful of websites daily for alter data analysis. I plan on using this data set as an intro to machine learning where I'll make website where users try to guess which headlines are real and which are fake.

### Studyclix user base analysis

#### Python / R

- Collected my own data set of all users on Studyclix.ie. With this I compared the average student to the average Studyclix user and gave some insight into what type of person the average Studyclix user is.

### Database parser

#### C

- A program to parse the data of an open data set detailing all airports and aerodromes worldwide. Each data point holds information such as ICAO code, coordinates, name and timezone.
- Took on this project after my first year of C as a means of strengthening my knowledge of dynamic allocation and general knowledge of the C language.

### Using an OCR to cheat memory tests

#### Python

- Combined Google's tesseract OCR and python to make a script capable of insane high scores on an online verbal memory test mini-game.
- Average score is 13 and my script can obtain any score given enough time.

### QR code anywhere chrome extension

#### Javascript

- Developed a chrome extension to easily swap between screens by displaying a QR code for any web page that can be scanned by a phone.
- Instead of typing very long URLs into my phone I now just scan the QR code and can enjoy browsing the same page on my phone with ease.

## VOLUNTEERING

### Safety Officer & Public Relations Officer

I was the 18/19 P.R.O for NUIG drone society and I am the current safety officer for the society

### Ordinary Committee Member

I'm on the committee for NUIG Computer society. I help out with committee work that needs to be done and am learning a bit about the operation and maintenance of our servers on the side.

## SUMMARY

I am a motivated and diligent individual with a keen interest in the ever expanding world of technology. I pride myself on my dedication to whatever I am tasked with and love the rewards that problem solving through programming has to offer. Love to apply my programming knowledge to fix real world problems.

## EDUCATION

### BSc Computer Science and Information Technology

#### NUI Galway

09/2018 - Ongoing

Graduating in 2022

## FAVORITE MODULES

Algorithms

Discrete Mathematics

Statistics For Data Science

C Programming

Web Development

Software Engineering

Object Orientated Programming

## PUBLICATIONS

### Tesseract & Python OCR Guide

Wrote a wiki post for NUIG's CompSoc wiki page that taught beginners how to recreate my own project step by step.  
<https://bit.ly/37ogKsN>

## LANGUAGE EXPERIENCE

#### C



#### Python



#### JavaScript



#### Java



#### Go

