# **DEAN**CONNELL

GRADUATE DATA ANALYST

#### **MY SKILLS**

#### **Programming Skills**



#### **Professional Skills**

Machine Learning

Deep Learning

Natural Language Processing

Algorithms and Data Structures

Statistical Modelling

Statistical Analysis

Data Visualization

Data Wrangling

#### **AWARDS**

#### Jan 2022

#### **NUI Galway Postgraduate Scholarship Award**

A scholarship based on acceptance to a full-time taught course at NUI Galway, and attainment of a first class honours (or equivalent) in a Level 8 primary degree.

#### Sep 2018

#### Maynooth University Entrance Scholarship

A scholarship awarded to first year undergraduate students based on achieving 550 or more CAO points.

References available upon request.

#### **PROFILE INFO**

Detail-oriented and inquisitive graduate data analyst with four years of experience using Python and Java and two years of experience using R. Proficient with OOP languages, algorithms and data structures. Holds experience in statistical modelling, statistical inference and machine learning using both Python and R. Enjoys collaboration and driven to dissect and analyse datasets to produce intensive reports contextualising and visualising data.

#### **EDUCATION HISTORY**



#### 2021 - 2022 M.Sc. Data Analytics NUI Galway

Machine learning, deep learning, natural language processing, data visualization, data mining, linkeddata analytics, network science. Projected overall grade: 1.1



## 2018 - 2021 B.Sc. Computational Thinking Maynooth University

Algorithms, data structures, statistical inference, linear models, statistical modelling, general topology, multivariable calculus. Final overall grade: 1.1 (77.2%)

#### **PROJECTS**



#### Python | Oct 2021 - Nov 2021 Perceptron Learning Algorithm

Built a perceptron classifier from scratch with my colleague, without using any previously developed machine learning packages.

Developed a novel summary function, which prints out useful model information such as the separating hyperplane equation and accuracy metrics on training data.

Compared this implementation with the Scikit Learn Perceptron and recorded an average

Compared this implementation with the Scikit Learn Perceptron and recorded an aver increase of 4.5% across all performance metrics studied on the same dataset.



### MATLAB, Python | Nov 2020 - Mar 2021 EEG Data Analysis of Stroke Patients

Conducted research into stroke, EEG data analysis techniques and signal processing to identify the utility of EEG in stroke identification.

Calculated Event Related Potentials (ERPs) for control and stroke groups using MATLAB and EEGLab.

Implemented five machine learning classification algorithms on ERP data in Python and compared prediction accuracy.

Identified best EEG classifier from studied set with an 83.93% accuracy level.

#### **EXPERIENCE**



#### Oct 2021 - Jan 2022 Teaching Support Staff NUI Galway

Corrected assignments for a cohort of first year undergraduate IT students, which introduced them to programming principles and algorithms through Python.



#### Sep 2020 - Dec 2020 Computer Science Tutor Maynooth University

Tutored students taking an introductory course in Algorithms and Data Structures for two hours per week, helping them with concepts and programming issues.

