**7PAM2002 Data Science Project Module**

**Choosing a Project Form**

This form will be used by the module leader to allocate a supervisor to you and by your supervisor in your first supervision session.

Once completed, submit the form into ‘Assignments’ on the Project Module Canvas site.

**Student Full Name:** Polwatte Rajapaksha Wasala Mudiyanselage Ridmi Yasanthi Weerakotuwa

**Student ID:** 21090263

**Course:** 1 year

**Semester intake to the course:** A

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| The subject of your bachelors degree(s). | BSc (Hons) Information Technology Specializing in Data Science |
| Your career aims and the industry you would like to get into. | Business Intelligence Engineer  Data Scientist  Data Analyst  SQL Developer |
| A brief account of your programming/data science experience (including work or placement). | * 6 months industry experience as Intern data scientist * 1+ year industry experience as Associate Business Intelligence Engineer * Done research using NLP for question generation and gamification.   Method used:  Part-of-Speech (POS) tagging  Named Entity Recognition (NER)  Support Vector Machine (SVM) algorithm  Text-to-text-transfer transformer (T5 transformer)  Berkley Constituency Parser  OpenAI GPT2 |
| Your hobbies, activities or interests. | Interest – computer vision (did some projects on face detection and facemask detection)  Image processing |
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| **Proposed project title**  **(topic(s) that you are interested in).** | Real-time Driver Monitoring System   * Aim is to train models which can identify drowsiness or distraction based on the combined analysis of head-pose, gaze, drowsiness, and facial expressions and alert them. |
| **Dataset(s) that you may use.** | MPIIGaze  FER2013 / FER2013+ |
| **Data science/ML techniques that you may use.** | Convolutional Neural Network (CNN) / Recurrent Neural Network (RNN) |
|  |  |
| **Preference for supervisor.** | No preference: |
| First choice: Rafael de Souza |
| Second choice: Will Cooper |