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Feasibility of a Convolutional Neural Network for Driver Drowsiness Detection

ES327: Individual Project
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September 2024

Contents

1 Introduction

The introduction should define the aim, objectives, scope, and stretch targets of your project. You should also justify the project by discussing its importance, the existing knowledge in the area, and the measurable benefits. Refer to key literature sources here. This is a citation example [1].

1.1 Aim and Objectives

Clearly state the project's aim. Outline the specific objectives that will be used to achieve the aim.

1.2 Scope

Define the project's scope, including the boundaries of what will and will not be covered.

1.3 Justification and Benefits

Discuss why this project is important, what problems it will solve, and what measurable benefits it will provide.

2 Risk and Constraints

In this section, outline the key risks and constraints related to the project. Focus on those that are particularly relevant, and discuss how you plan to manage them.

2.1 General Project Risks

Discuss general risks such as time, uncertainty, and access to information.

2.2 Specific Constraints

Address specific constraints, such as:

- **Time management**: How will you ensure timely progress?
- **Data security**: Managing data and intellectual property concerns.
- **Sustainability and environmental considerations**.
- **Health and safety**: Risks and mitigations.
- **Standards and legislation**: Which industry standards or legal requirements are relevant?

3 Project Plan

Provide an initial project plan, including milestones, timelines, and the criteria for measuring progress. Discuss how you will monitor and adjust the plan throughout the project lifecycle.

3.1 Milestones

List the key milestones and their respective deadlines.

3.2 Progress Measurement

Explain how progress will be tracked (e.g., logbooks, regular reviews).

3.3 Risk Management

Outline backup plans for unforeseen events, such as delays or data issues.

4 Ethical Considerations

Discuss the ethical implications of your project. Include whether an ethical approval is required, and if so, the steps taken to secure it. Confirm that the ethical review flowchart has been completed and the outcomes have been agreed upon with your supervisor.

5 Initial Literature Review

Summarize the key literature that supports your project. Conduct a brief literature review to gather relevant information and demonstrate an understanding of the current state of knowledge in the field.

6 Feasibility of Implementation

Analyze the feasibility of implementing your project based on your initial findings. Use evidence and numerical justification where possible. Assess the challenges and whether they

can be realistically addressed within the available time and resources.

7 Conclusion

Provide a conclusion that summarizes the feasibility of your project and reflects on the potential impact of the project if successfully implemented.

References

[1] Albert Einstein. Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]. *Annalen der Physik*, 322(10):891–921, 2023. doi: http://dx.doi.org/10.1002/andp.19053221004.