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A Appendices

Appendices and code are also avaliable on github at: https://github.com/georg22tech/NHclimber

A.1 CONOPS and Design Requirements

Concept of operations and design requirments document.

A.2 Risk Registers

Documents detailing identified project delivery risks and mitigation strategies, created at various stages throughout the project.

A.3 Meeting Presentations, Agendas and Minutes

Documents from team coordination meetings and meetings with supervisors or sponsors.

A.4 Team Charter

Document outlining initial agreement on goals and responsibilites within the team, including the process for raising and sorting complaints.

A.5 Gantt Charts and Task Tracking

Timeline visualisations of project schedule and project flow. Task tracking spreadsheets and documents used during project.

A.6 Raspberry Pi Code

Source code used in embedded motor control

A.7 PiPico Code

Code for microcontroller communication

A.8 Project Budget and Expenditure

Financial tracking of project phase

A.9 Mechanical Design CAD Files

3D models and technical drawings

A.10 Motion Tracking in Videos Code

Scripts used for tracking movement in recorded footage

A.11 Modelling and Simulation Code

MATLAB and Python simulation files

A.12 Electronics Design Files

Circuit schematics and PCB layouts

A.13 GUI Testing Table

Modular testing of GUI features

A.14 YOLOv11n Training Dataset

Dataset used to train YOLOv11n model

A.15 Control Methodology Diagrams

Diagrams used in the creation and explanation of control methods.