**CLion remote developing and debugging for RPI and other remote Linux systems**

**Date: 30.10.2024**

**Written by: GRIGORI DMITRII**

1. **Introduction**

This project involves exploring the methods for developing and debugging applications using cross-compiling and remote debugging for Raspberry Pi and/or other distinct Linux platforms, utilizing the CLion development environment. Additionally, the creation of a tutorial covering these processes is required.

1. **System Overview**

As a development environment, CLion will be used for this project, specifically 2024.2.3 version (tutorial may vary for future versions) and a students’ email account will be used for free license. If a student account is not used, the license is limited to 30 days.

For remote developing environment: several will be included in this documentation, which include:

* Raspberry PI on hardware
* Raspberry PI in Docker environment
* Raspberry PI in VM.
* OS based on Linux (Debian 12, Ubuntu 24 and others may apply)