Loop Closure Installation Instructions

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**1. Introduction**

The loop closure code can be obtained from:

[\\bam\Shared Folder\Code Transfer\Jacky Chen](file:///\\bam\Shared%20Folder\Code%20Transfer\Jacky%20Chen)

A complete description of how the code is used for identifying loop closure can be found in the *Loop Closure Guide*.

The folders *fabmap* and *buildMST* contain the Visual Studio 2008 Solution and C++ code. The Matlab code can be run as-is, without external dependencies or explicit compilation requirements. The C++ code has been successfully compiled through Visual Studio 2008 on Microsoft Windows 7 as a 32-bit executable program.

This document is organized as follows: Section 2 describes how to compile the C++ code from the .sln file. Section 3 is a step-by-step description for downloading and installing external dependencies and compiling the modeling C++ source code from scratch.

**2. Compiling From the Provided Visual Studio Solution**

You can compile the C++ programs by opening the file *fabmap.sln* and *buildMST.sln* in Visual Studio 2008. Compile the code by clicking Build > Build Solution. This should result in the creation of the executable *fabmap.exe* and *buildMST.exe*. Within Visual Studio 2008, you can also execute the programs. First, specify the command line arguments and the working directory by setting the appropriate fields in Project > *projectName* Properties > Configuration Properties > Debugging. Second, click Debug > Start Debugging.