- 1. Install all of the above software components.
- 2. Initialize a clean catkin workspace. Open a terminal and type

```
mkdir -p ~/catkin_ws/src
cd ~/catkin_ws/src
catkin_init_workspace
```

3. Clone this repository with all its submodules in the src folder of your workspace

```
git clone --recursive
git@github.ic.ac.uk:KukaProject/alex_code.git
```

4. Install all dependencies. You might need to setup rosdep first

```
rosdep update
rosdep install ——from—paths src ——ignore—src —r —y
```

5. Build workspace with catkin build

```
cd ~/catkin_ws
catkin build
```

6. Remember to source the setup.bash file or add it to your .bashrc

```
source /opt/ros/kinetic/setup.bash
or
echo "source /opt/ros/kinetic/setup.bash" >> ~/.bashrc
```

7. Call rosgenmsg("~/catkin_ws/src/kuka/kuka_msgs") in Matlab command window and follow onscreen instructions. See further instructions here