1. **Peter Corke’s Robotic Toolbox**

Need to install the toolbox for use. Heavily used for the coursework!

1. **6DOF robotic Arm**

Used in the small 6DOF robotic arm that we used for smeaton

1. **Analysis of 6DOF robotic arm from first principles**
   1. **Transformation between frame {1} to frame {0}**
   2. **Transformation between frame {2} to frame {1}**
   3. **Transformation between frame {3} to frame {2}**
   4. **Transformation between frame {4} to frame {3}**
   5. **Transformation between frame {5} to frame {4}**
   6. **Transformation between frame {6} to frame {5}**
   7. **Forward kinematics: frame {6} to frame {0}**
2. **Analysis of 6DOF arm using classical Denavit-Hartenberg Parameters**
   1. **Build the Denavit-Hartenberg table**
   2. **Forward kinematics**
   3. **Display default configuration**
   4. **Build interactive model**
   5. **Build scatter plot of random arm locations**
   6. **Animated trajectory following**