

## 13. pielikums

### Ekspierimentu stenda datorprogrammas komunikācijas veidošanas kods

```
using System;
using System.IO;
using System.Net.Sockets;
using System.Text;
using System.Threading;

namespace UR10
{
    public interface IConnection
    {
        (bool, string) ConnectToUr10();
        (bool, string) DisconnectFromUr10();
        Stream GetStream();
        void SendServiceMessage(string message);
    }

    class Connection: IConnection
    {
        TcpClient client;
        TcpClient clientInitializeRobot;
        Stream serviceStream;

        public (bool, string) ConnectToUr10()
        {
            string exception = null;
            try
            {
                client = new TcpClient();
                client.Connect(Properties.Settings.Default.IpAddress, 30001);

                clientInitializeRobot = new TcpClient();
                clientInitializeRobot.Connect(Properties.Settings.Default.IpAddress, 29999);
                serviceStream = clientInitializeRobot.GetStream();
            }
            catch(Exception exc)
            {
                exception = exc.ToString();
            }

            return (client.Connected && clientInitializeRobot.Connected, exception);
        }

        public (bool, string) DisconnectFromUr10()
        {
            string exception = null;
            try
            {
                client.Close();
                client.Dispose();

                clientInitializeRobot.Close();
                clientInitializeRobot.Dispose();
            }
            catch (Exception exc)
            {
                exception = exc.ToString();
            }

            return (!client.Connected && !clientInitializeRobot.Connected, exception);
        }
    }
}
```

```
public Stream GetStream()
{
    return client.GetStream();
}

public void SendServiceMessage(string message)
{
    byte[] messageBytes = Encoding.ASCII.GetBytes(message+"\n");
    serviceStream.Write(messageBytes, 0, messageBytes.Length);
    Thread.Sleep(5000);
}
```