

## ECS512 Sound Design - Lab 1: Introduction to Pure Data

The basics of Pure Data will be introduced from the ground up in the first half of this lab and then for the second half we will look at a model of a telephone dial pad that will tie together everything we have learned.

The topics covered in the first half of the lab will be as follows

- Creating objects, message boxes and number boxes
- Inlets and outlets
- Connecting and disconnecting things
- Edit mode
- The different types of connections(signal/control data)
- How objects are used
- Shortcuts
- Comments
- Arithmetic
- Hot/Cold Inlets
- Bang/Trigger
- Print
- Mathematical Expressions using *'expr'*
- *'moses'*, *'sel'*, *'=='* and *'random'*
- Float and Counters
- List – Pack/Unpack
- Message – *'set'*
- *'spigot'*
- *'metro'* and *'delay'*
- *'line'*
- Send/Receive

We will then try and build the dialling pad from scratch utilising some of the previously learned topics. Please note that this lab isn't being graded as it only serves as an introduction.

The topics covered are explained in more detail at <http://www.pd-tutorial.com/english/ch02.html#chapt2.1.1> and <http://www.pd-tutorial.com/english/ch02s02.html>. I encourage you to check both these links out as they will reinforce everything being demonstrated here today and will give you a more grounded understanding for future assignments.