Convolutional Encoder & Tail Biting Viterbi Decoder For AWGN Channel

# USER MANUAL

**Platform:**                          **Linux (Developed and tested on Linux (suse))**

**How to Use This System????...**

   Run the '**make**' command at the console to compile the source code.

   Type "**./ce** " at the console to run the program

   Ex:
     xxx@linux> make
     xxx@linux>./ce

   Once the above command is executed, the system queries for the following inputs

  **Enter the k and n values**

--- Normally k value lies in the range of 1 to 7 and n value lies in the range of 2 to 8

  **Enter the constraint length K**

--- Constraint length K is the length of the polynomial.

  **Enter the n polynomials**

--- Enter the 'n' polynomials in binary

  **Enter the Packet size to send along the channel**

--- This value should be a multiple of 'n'.

  **Enter the number of Packets to Transmit over the channel**

--- Specify the number of packets to be transmitted over the channel.

  **The System now displays various things that are computed during the process of encoding, transmitting over the channel and decoding phase. Finally it displays the Bit error rate.**
  **To view the complete details of last transmission view the "logfile.txt"**
- o  vi logfile.txt or
- o  cat logfile.txt

**Note: View and checkout the logfile.txt contents to understand how the system is interacting with the user and also to test for the cases already done.**