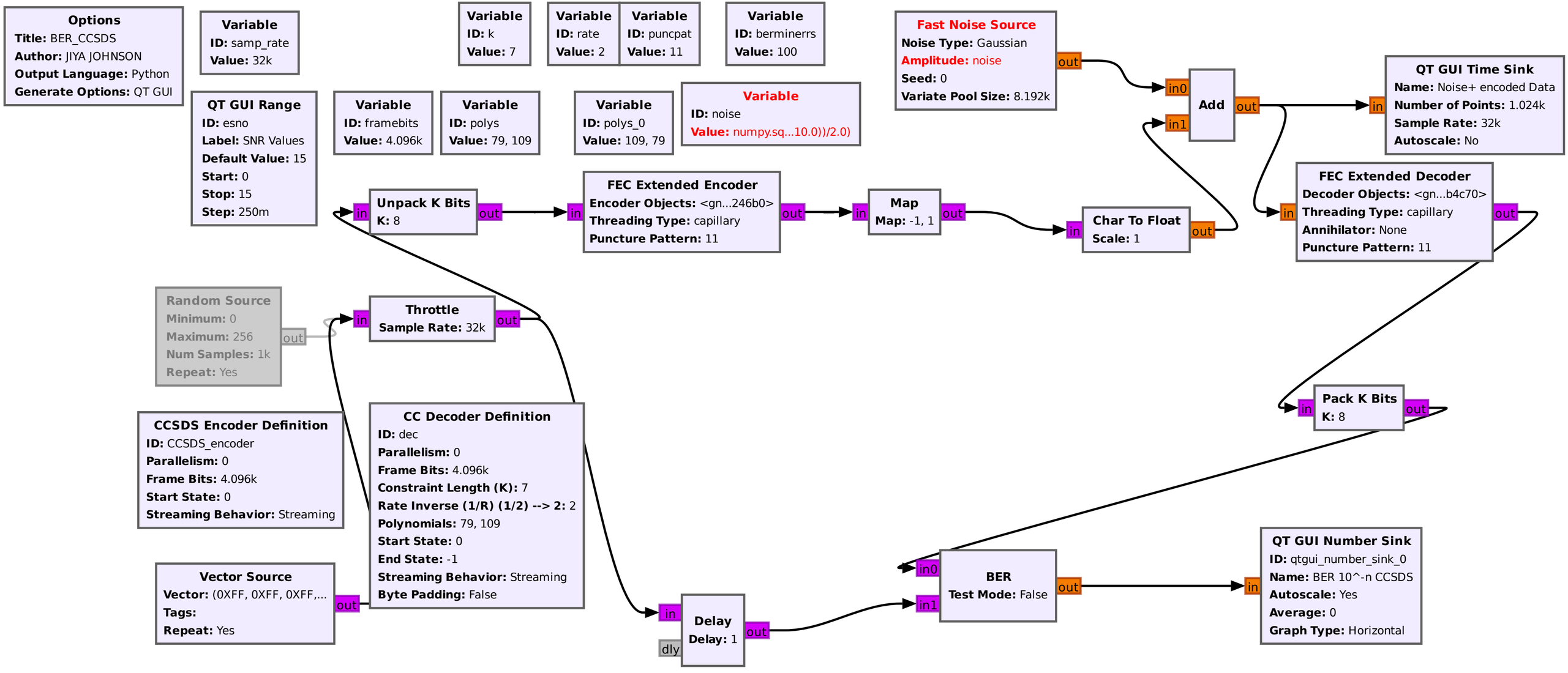
Options
Title: BER_CCSDS
Author: JIYA JOHNSON
Output Language: Python
Generate Options: QT GUI
Variable
ID: samp_rate
Value: 32k
Variable
ID: k
Value: 7
Variable
ID: rate
Value: 2
Variable
ID: puncpat
Value: 11
Variable
ID: berminerrs
Value: 100
Fast Noise Source
Noise Type: Gaussian
Amplitude: noise
Seed: 0
Variate Pool Size: 8.192k
out
in0
in1
Add
out
QT GUI Time Sink
Name: Noise+ encoded Data
Number of Points: 1.024k
Sample Rate: 32k
Autoscale: No
QT GUI Range
ID: esno
Label: SNR Values
Default Value: 15
Start: 0
Stop: 15
Step: 250m
Variable
ID: framebits
Value: 4.096k
Variable
ID: polys
Value: 79, 109
Variable
ID: polys_0
Value: 109, 79
Variable
ID: noise
Value: numpy.sq...10.0))/2.0)
in
Unpack K Bits
K: 8
out
in
FEC Extended Encoder
Encoder Objects: <gn...246b0>
Threading Type: capillary
Puncture Pattern: 11
out
in
Map
Map: -1, 1
out
in
Char To Float
Scale: 1
out
in
FEC Extended Decoder
Decoder Objects: <gn...b4c70>
Threading Type: capillary
Annihilator: None
Puncture Pattern: 11
out
Random Source
Minimum: 0
Maximum: 256
Num Samples: 1k
Repeat: Yes
out
in
Throttle
Sample Rate: 32k
out
in
Pack K Bits
K: 8
out
CCSDS Encoder Definition
ID: CCSDS_encoder
Parallelism: 0
Frame Bits: 4.096k
Start State: 0
Streaming Behavior: Streaming
CC Decoder Definition
ID: dec
Parallelism: 0
Frame Bits: 4.096k
Constraint Length (K): 7
Rate Inverse (1/R) (1/2) --> 2: 2
Polynomials: 79, 109
Start State: 0
End State: -1
Streaming Behavior: Streaming
Byte Padding: False
Vector Source
Vector: (0XFF, 0XFF, 0XFF,...
Tags:
Repeat: Yes
out
in
dly
Delay
Delay: 1
out
in0
in1
BER
Test Mode: False
out
in
QT GUI Number Sink
ID: qtgui_number_sink_0
Name: BER 10^-n CCSDS
Autoscale: Yes
Average: 0
Graph Type: Horizontal