

REPUBLIC OF MACEDONIA Ss. Cyril and Methodius University in Skopje Faculty of Computer Science and Engineering



P.O. Box 393, 1000 Skopje; Tel: 02/30 88 255; www.finki.ukim.mk

Final project proposal

Type	Undergraduate	
Title	Gaussian Channel	
Supervisor	prof. d-r Verica Bakeva	
e-mail	verica.bakeva@finki.ukim.mk	
Department / Group		
Department of Theoretical Foundation of Informatics		
Topic(s)		
Information Theory		
Project can start from		01.04.2013
Project duration		4 months
Short description		

The most important continuous alphabet channel is the Gaussian channel. This is a time discrete channel with output Y_i at time i, where Y_i is the sum of the input X_i and the noise Z_i . The noise Z_i is drawn i.i.d. from a Gaussian distribution with variance N.

The student will have to study and research this problem, write a report about this research and make a program for simulation of this type of channel. It is going to be an individual activity.

No need of any kind of specialized lab equipment.

Results and assessment

The student needs to write a report, make a program for simulation of Gaussian channel and give a presentation of a project.

Other (additional) information