

## 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   | Markov Chains and Queueing Theory |
| Supervisor  | prof. d-r Verica Bakeva           |
| e-mail  | verica.bakeva@finki.ukim.mk       |
| Department / Group                                  |                                   |
| Department of Theoretical Foundation of Informatics |                                   |
| Topic(s)  |                                   |
| Probability Theory                                  |                                   |
| Project can start fi                                | rom 01.04.2013                    |
| Project duration                                    | 4 months                          |
| Short description                                   |                                   |

A Markov chain is one of the most important stochastic processes which can be used for description of many real processes. The basic models in queueing theory use exactly Markov chains.

The student will have to study these processes and their applications in queueing systems. He/she will have to write a report about this research and make a program for simulation and visualization of a queuing systems. 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 and visualization of a queuing systems and give a presentation of a project.

## Other (additional) information