

## Statement of Purpose

I am 21 years old and I expect to graduate and obtain a Bachelor of Science degree in the field of Electrical Engineering (Electronics) from Tehran University in June 2011. I have passion to continue my graduate studies in the field of Electrical Engineering at your reputable university.

My interest in Electronics dates back to my school days, when I was so curious to realize how electronic gadgets work. I frequently opened and repaired our electrical devices enthusiastically. I started to build and design simple circuits in high school and I found Electrical Engineering the subject where I can turn my design ideas into reality. I appealed to Electrical Engineering because of its challenging and updating nature as well as its significant role in the life of people.

I have reviewed the topics of researches which are being carried out at Leuven University and I have found them so close to my interests. Topics like "Mixed-signal system design" or "RF CMOS Circuit Design" are the subjects that not only comprise my main interests in Electronics, but also they are the ones that I have experience in them more than a bachelor student. The reputation of Leuven publications and papers in the field of Analogue circuits is actually my main motivation for selecting KUL as my Master education university.

I spent significant number of hours in Microprocessors and IC Design Lab as a teacher assistant or research assistant working on Microprocessor and Electronics Projects. I learned a number of advanced engineering software and simulation tools including the details of CADENCE, HSPICE, QUARTUS, MODELSIM, CODEVISION AVR, MATLAB for research. I am confident that upon entering your program, I will be able to assist your faculty who may need an assistant capable and enthusiastic to help and learn.

Furthermore, I was motivated to attend some extra-courses on relevant topics and my enrollment in „VLSI“ which is offered for computer students was the result of that interest. I became familiar with several more simulation tools in VLSI including LEONARDO, LEDIT, SEDIT, and NIOS.

I am currently conducting my B.Sc. project under the supervision of my dedicated professors, Dr. Seyed-Kamaleddin Setarehdan and Dr. Shahin Jafarabadi-Ashtiani, on the design and implementation of a cardiac output calculator device with ICG method. This method is based on measuring the cardiac impedance in order to calculate the output blood volume of heart. This project is in possession of both Analogue and Digital components, which should be considered as its prominent point.

My intention for applying to the Master program at KULeuven University is due to its well-published and distinguished faculty members such as Drs. Georges G., Steyaert M., Puers R., Dehaene W. and Reyneart P. along with its active researchers which would make up a informative and hardworking atmosphere. Besides, I have a sister and some other relatives in Belgium who are thoroughly supportive of me. In this circumstance, I have sufficient incentive to devote myself extensively to research and study.

My goal is clear; namely, conduct my graduate studies towards master and PhD degrees in the field of Electrical Engineering. My career objective in the long run is to join a university and a research center to contribute to the advancement of the theoretical and practical knowledge of Electrical Engineering.