

---

## Vital Information

Gender: Female  
Nationality: Holding both **Canadian** and **Iranian** citizenship  
Birth: Kitchener  
Date of birth: October 17, 1987

---

## Education

2006- **B.Sc. in Electrical Engineering**  
2010 School of Electrical and Computer Engineering (ECE)  
(Expected) University of Tehran, Tehran, Iran  
Overall **GPA**: 17.96/20.00 (**1<sup>st</sup> Rank** among all the students of the Control Department)  
\* The Control Dept. of University of Tehran has been ranked first by Iranian Ministry of Science and Technology.

2002- **Diploma in Mathematics and Physics**  
2006 Overall GPA: 19.43/20.00

---

## Honors

- ✓ Top **0.05 %** of **450,000** participants (**208<sup>th</sup>**) of the nationwide university entrance exam (Konkour-e-Sarasari), summer 2006.
- ✓ Faculty of engineering scholarship award for academic excellence, 2006-2009.

---

## Publications

- [1] Z. Faraji-Dana, A. Nikoofard, (2009) “Using OWA Method for Choosing the Best Cell Phone”, Proceeding of the 3<sup>rd</sup> joint congress on Fuzzy and Intelligent Systems, Yazd, Iran, 6 pages.
- [2] A.Nikoofard, Z.Faraji-Dana, (2009) “Using OWA Method in K-Nearest Neighbor Algorithm”, Proceeding of the 3<sup>rd</sup> joint congress on Fuzzy and Intelligent Systems, Yazd, Iran, 5 pages.

## Research Experience

---

- Summer 2009      **Traffic Control System:**  
It was my project during my internship in Power Economics Lab, University of Tehran. I became familiar with Aimsun software. In this project, we aimed to control the traffic lights. Therefore we simulated the dynamics of freeways and their entrances. We designed an algorithm for controlling the traffic lights and implemented it using the Python language.
- Spring 2009      **Using Ordered Weighted Averaging (OWA) Method for Choosing the Best Cell Phone:**  
It was a fuzzy decision making problem. In this project we used OWA method in order to choose the best cell phone among three choices: Nokia 7260, Sony Ericsson K700i and Motorola V80. Our justification was based on two main criteria: manufacturing features and user friendliness. This project was an effort to compare non-fuzzy algorithms like TOPSIS with the fuzzy method OWA. This led us to the point that OWA is a more robust and quicker method.
- Spring 2009      **Using OWA Method in K-Nearest Neighbor Algorithm:**  
We have applied the OWA method to sort the items in a set according to their nearness to a reference, holding any arbitrary definition of similarity. We aimed to find the  $K^{\text{th}}$  most similar one to our reference. We have chosen Abalone shellfishes as a case study and applied our algorithm to it in order to prove the efficiency of OWA method in comparison with normal non-fuzzy methods.

## Teaching Experience

---

- Spring 2009      **Probability and Statistics** (Teaching Assistant)  
ECE Department, University of Tehran, Instructor: Dr. Adhami Mirhosseini.
- Spring 2009      **Electronics Lab I** (Lab Instructor)  
ECE Department, University of Tehran, Lab director: Dr. Jafarabadi-Ashtiani.
- Spring 2008      **Probability and Statistics** (Teaching Assistant)  
ECE Department, University of Tehran, Instructor: Dr. Adhami Mirhosseini.

## Graduate Courses

---

- Spring 2009      **“Fuzzy Logic”**  
Instructor: Dr. Caro Locus

## Technical Skills and Competences

---

- ✓ **Programming Languages:** MATLAB, C++
- ✓ **Professional Software and toolboxes:** Simulink, MATLAB's Control Toolbox, Quartus, ModelSim, HSpice, PSpice, Verilog, Aimsun
- ✓ **Software & OS:** Windows, Microsoft Office

## Selected Academic Projects

---

Spring 2009	Designing and implementation of a simple electronic organ, as a course project for Electronics Lab II.
Spring 2009	Designing state feedback, full and reduced order observers, using MATLAB, as a course project for Modern Control.
Spring 2009	Designing and implementation of a simple voter on FPGA, using Quartus, as a course project for Logical Circuits Lab.
Spring 2009	Designing and implementation of a vending machine on FPGA, using Quartus, as a course project for Logical Circuits Lab.
Fall 2008	Designing a single ended folded cascade opamp and also power amplifiers using Hspice, as a course project for Electronics II.
Fall 2008	Simulation of power transformers (considering the nonlinear effects) using MATLAB, as a course project for Electrical Machines II.
Spring 2007	Simulation of synchronous and asynchronous motors using MATLAB, as a course project for Electrical Machines I.
Spring 2007	Several computer projects of Signal and Systems course on continuous-time and discrete signal processing using MATLAB toolboxes.

## Society and Committee Membership

---

- ✓ **IEEE WIE** (Woman In Engineering) executive committee member, Iran section, 2009
- ✓ **IEEE GOLD Coordinator** (Graduate Of the Last Decade) member, Iran section, 2009.
- ✓ **IEEE** student member, 2009.

## Languages

---

- ✓ Fluent in English and Persian
- ✓ Familiar with Arabic

## Qualification Test Scores

---

- ✓ TOEFL (Internet-Based Test): To be taken on December 20
- ✓ GRE general (Paper-Based Test): To be taken on October 24

## Other

---

- |           |  |
|-----------|--|
| 2009      | Member of the organizing committee of the 1 <sup>st</sup> IEEE SPC (IEEE Student Paper Contest) held in University of Tehran |
| 2008-2009 | Web master of the IEEE Student Branch of University of Tehran  |
| 2006-2009 | Active member of IEEE Student Branch of University of Tehran   |

## Interests and Hobbies

---

- ✓ Swimming and Hiking, Iranian Folk and Traditional Music, Historical and Scientific Books.