

# Negin Firouzian

Computer Engineering Department  
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## Research Interests

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- Computer Architecture
- Machine Learning
- Computer Systems
- Parallel Computing

## Education

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- **Amirkabir University of Technology (Tehran Polytechnic)** Tehran, Iran  
*B.Sc. Computer Engineering.* Sept. 2015 – Apr. 2020  
Cumulative GPA: 17.51/20 (88%)  
Last three years GPA: 18.30/20 (91.5%)
- **Farzanegan High School (NODET)** Bojnord, Iran  
*Diploma, Mathematics and Physics.* Sept. 2011 – June 2015  
Cumulative Grade Average: 19.56/20

## Honors and Awards

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- Awarded the **Outstanding Student** title by the head of Computer Engineering Department, Amirkabir University of Technology, Tehran, 2018, 2019.
- Achieved **4th Place** in 5th **National Digital Design Contest**, FPGA Challenge League, 2018.
- Achieved **top 0.25%** place among all applicants of the Nationwide University Entrance Exam (Approximately 180,000 applicants), 2015.
- **Semi-finalist** at National **Computer Olympiads**, 2013, 2014.
- **Semi-finalist** at National **Mathematics Olympiads**, 2013, 2014.
- **Semi-finalist** at National **Physics Olympiads**, 2013.
- Recognized **Exceptional** talent by **National Organization of Developing Exceptional Talents (NODET)**, 2008.

## Research Experience

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- **Hardware Acceleration of Artificial Neural Networks Using FPGA-based SoC** Tehran, Iran  
*BSc Thesis* June 2019 - Present  
*Under the supervision of Prof. Hamid R. Zarandi, Amirkabir University of Technology*

## Teaching Experience

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- **Teaching Assistant, Computer Aided Digital Systems Design** Spring 2018, Spring 2019  
*Instructed by Prof. Morteza Saheb Zamani, Amirkabir University of Technology*
- **Teaching Assistant, Logic Circuits** Fall 2017, Fall 2018  
*Instructed by Prof. Mehdi Sedighi and Prof. Morteza Saheb Zamani, Amirkabir University of Technology*
- **Teaching Assistant, Microprocessor and Assembly Language** Fall 2018  
*Instructed by Prof. Mohammad Mehdi Homayounpour, Amirkabir University of Technology*
- **Teaching Assistant, Computer Architecture** Spring 2018  
*Instructed by Prof. Hamed Farbeh, Amirkabir University of Technology*

## Work Experience

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- **Niligo** Tehran, Iran  
*Embedded System Developer, Summer Intern* June 2018 - Sep 2018
  - **Smart Lamps:** Using an ambient light sensor and Arduino to adjust the lamp's brightness automatically, according to the room's lighting.
  - **IoT Speaker:** Using a PCM interface for digital to analog conversion of audio for the IoT speakers.
- **Digital Systems Design lab (DSD lab),** Tehran, Iran  
*Undergraduate Researcher, Amirkabir University of Technology* April 2017 - May 2018
  - **IoT Gateway:** Researching on a method for remotely reconfiguring Xilinx Zynq-7000, as a part of the IoT Gateway project.
  - **FPGA Lab manual:** Editing and reviewing the former FPGA Lab manual for releasing a new manual version.

## Professional Skills

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- **Programming Languages:** Java, C, C++, Python, JavaScript.
- **Hardware Description Languages:** VHDL, Verilog.
- **Typesetting:** Microsoft Office,  $\text{\LaTeX}$ .
- **Design, Synthesis and Simulation Tools:** Xilinx Vivado Design Suite, Modelsim, Quartus II, Xilinx ISE Design Suite, Proteus, PSpice, HSpice.
- **Miscellaneous:** MySQL, Microsoft SQL Server, MongoDB, MATLAB, Simulink, Git.

## Language Skills

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- **English:** Professional working proficiency,  
**TOEFL iBT** Score: **107/120** (Reading: **29/30**, Listening: **28/30**, Speaking: **25/30**, Writing: **25/30**)
- **Persian:** Native proficiency

## Interests and Activities

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- **Interests:** Traveling, Photography, Reading, Cycling, Soccer, Playing Piano and Guitar, Discovering different cultures.
- **Volunteering:** Event Staff, 17th International [AUT ACM ICPC](#) - (Fall 2017)  
Event Photographer, 1st AUT Data Mining Cup - (Fall 2017)

*References, further information, and proofs are available upon [request](#).*