

# Ali Hejazizo | Curriculum Vitae




University of Alberta—Department of Computer Science

☎ (+1) 780 680 3295 • ✉ [hejazizo@ualberta.ca](mailto:hejazizo@ualberta.ca) • 🌐 [ali-hejazi.com](http://ali-hejazi.com)  
in [hejazizo](#) • 🔗 [hejazizo](#)

## RESEARCH INTERESTS

- Artificial Intelligence
- Database Systems
- Natural Language Processing

## EDUCATION

- **Master of Science** May, 2016–Present  
 *University of Alberta* Edmonton-Canada
  - Computer Science May, 2017–2019 (Expected)
  - Electrical and Computer Engineering May, 2016–2017
    - GPA: 3.9/4 via 9 credits
- **Teaching Assistant** Fall 2015, Winter 2016  
 *Amirkabir University of Technology* Tehran-Iran
  - Courses:
    - Advanced Programming
    - C++ Programming
- **Bachelor of Science** 2011–2015  
 *Amirkabir University of Technology* Tehran-Iran
  - Electrical and Computer Engineering
    - Major: Power Systems GPA: 18.41/20 via 141 credits
    - Minor: Electronics GPA: 18.60/20 via 98 credits

## HONORS

- Ranked 1<sup>st</sup> in Electrical Engineering, Power Group, among more than 30 students, Amirkabir University of Technology, Tehran, Iran.
- Ranked 121<sup>st</sup> in university entrance exam, among more than 300,000 participant [Summer 2011].
- Full fund admission from department of Electrical and Computer Engineering at University of Alberta for M.Sc. program.
- Exempted from university entrance exam for M.Sc. program and offered M.Sc. program in Sharif University of Technology.
- Exempted from university entrance exam for M.Sc. program and offered M.Sc. program in Amirkabir University of Technology.
- Permitted to study Electronics as a minor (This permission is only awarded to talented students, introduced by the Exceptional Talents Office).
- Granted admission from Talented Student Office of Amirkabir University of Technology for graduate study.

## INTERNSHIP

- Investigating detection and identification of abnormalities in customers' consumption patterns in power distribution systems, using Data Mining methods such as K-Means, PSO, Fuzzy, and SFLA algorithms, in order to

- reduce Nontechnical Losses.
- Supervisor: Dr. Hosseinian

## PUBLICATION

---

"Interoperability of Protection Systems in High Voltage Direct Current (HVDC) Networks", 2016 CIGRE Canada Conference Hyatt Regency Vancouver, Vancouver, BC Canada, October 17-19, 2016

A. Hejazizo, S. Pirooz Azad, and D. Van Hertem

Accepted on June 17th, 2016

📄 Click [here](#) to download.

## ONLINE COURSES (COURSERA)

---

- 👤 Machine Learning
  - Created by: Stanford University
- 👤 The Data Scientist's Toolbox
- 🐍 Programming for Everybody (Getting Started with Python)
- 🐍 Python Data Structures
- 🐍 Using Python to Access Web Data
- 🐍 Using Databases with Python
  - Created by: University of Michigan
- 📄 Introduction to HTML5
- 📄 Introduction to CSS3
- 📄 Interactivity with JavaScript
  - Created by: University of Michigan

## TEACHING EXPERIENCES

---

- 👤 Teaching Assistant for CMPUT 101 - Introduction to Computing Undergraduate Course. Winter 2017
  - Instructor: Dr. Janelle Harms (University of Alberta)
- 👤 Teaching Assistant for Advanced Programming Undergraduate Course. Winter 2016
  - Leading and supervising students in course material, assignments, exams and in small project teams (2-4 members) in completing several Python and C++ projects.
  - Instructor: Dr. Jahanshahi (Amirkabir University)
- 👤 Teaching Assistant for C++ Programming Undergraduate Course. Fall 2015
  - Designing assignments, instructing course material, and leading several small project teams (2-4 members) in completing more than 11 C++ projects.
  - Instructor: Dr. Jahanshahi (Amirkabir University)
- 👤 Teaching Assistant for Electrical Machines I Undergraduate Course. Winter 2014
  - Instructor: Dr. Moghani (Amirkabir University)
- 👤 Teaching Assistant for Engineering Mathematics Undergraduate Course. Fall 2013
  - Instructor: Dr. Norouzi (Amirkabir University)

## COMPUTER SKILLS

---

### Programming/Scripting

- C++
- Python
- Ruby
- Java
- JavaScript
- HTML5
- CSS3
- SQLite
- SPARQL
- RDF
- L<sup>A</sup>T<sub>E</sub>X
- MFC

### IDEs

- PyCharm
- IntelliJ
- MS. Visual Studio
- Spyder
- Qt Creator
- PyQt
- R-Studio
- Code-Blocks

### Technical Softwares

- Matlab
- LabView
- PSCAD

## ACADEMIC PROJECTS

---

- Self-determined Projects:
  - Applying support vector machines (SVMs) to build a spam classifier.
    - This project includes using SVM with Gaussian Kernels to classify emails which are not linearly separable into spam and non-spam classes.
  - Applying one-vs-all logistic regression and neural networks to a dataset.
    - This project includes applying logistic regression and neural networks to a dataset that contains 5000 training examples of hand-written digits from 0 to 9 to reach a recognition accuracy higher than 97%.
  - Applying normal and regularized logistic regression to datasets for classification purposes.
    - This project includes building a logistic regression model to predict whether a student gets admitted into a university and a regularized logistic regression to predict whether microchips from a fabrication plant passes quality assurance.
  - Applying linear regression with one variable and multiple variables to datasets for prediction purposes.
    - This project includes applying linear regression with one variable to predict the profits for a food truck and with multiple variables to predict the prices of houses.
  - Creating Telegram Robots using Telepot API.
    - @python\_compile\_bot: This robot receives commands from users and interprets them to python language, then shows the result in a neat and beautiful format.
- Supervised Projects:
  - Sending and receiving data using RS232 protocol. The project includes two GUI, one created by MFC to send data and one created by PyQt to receive, save and compare them with the original data to check for errors.
    - Supervisor: Dr. Jahanshahi [Winter 2015]
  - I.D.M.T over current relays coordination in a radial grid: Protection Lab project, simulated by PSCAD.
    - Supervisor: Dr. Hashemi [Winter 2015]
  - Analyzing the roles of HVDC transmission lines and FACTS in enhancing the efficiency of power transmission system: Future Power System Elements project.
    - Supervisor: Prof. Gharehpetian [Fall 2014]
  - Calculating Optimal Tower Height and Span Length, Voltage Gradient, and Thermal Rating of Transmission Line conductor, Simulated by Matlab.
    - Supervisor: Dr. Hosseini [Fall 2014]
  - Designing a Controllable Rectifier: Industrial Electronics project, simulated by Matlab.
    - Supervisor: Dr. Fathi [Winter 2014]
  - Linear and NonLinear Control of a Quadrotor: Linear Control Systems Project, Simulated by Matlab.
    - Supervisor: Dr. Talebi [Fall 2013]
  - Modulating Signals, AM/PM/FM Modulation, Simulating With Noise and Demodulating: Communication Systems Project, Simulated by Matlab.
    - Supervisor: Dr. Mohammadi [Fall 2013]
  - Designing , Simulating and Implementing Digital Circuits to Make Key Pad, Traffic Light and LEDs Flash with a Specific Pattern: Logic Circuits Laboratory project , Simulated and Implemented by Xilinx ISE Design Suite.
  - Simulation of a Traffic Light: Logic Circuits Lab Project, Simulated by Proteus.
    - Supervisor: Dr. Rezie [Winter 2013]

**❗ References, Further information, and Proofs are available upon Request**