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RESEARCH INTERESTS

- Data Management
- Data Mining
- Big Data Analysis
- Data Cleaning
- Databases
- Data Science

EDUCATION

- **Amirkabir University of Technology (Tehran Polytechnic)**, Tehran, Iran (Ranked 79th in Computer Science [U.S. News])
  B.Sc, Computer Engineering, *2012 - 2016 (expected)*
  - Cumulative GPA:
    Last two years (**64 units**): **17.65**/20 ≡ **3.73**/4[1]
    Selected courses (**40 units**)[2]: **18.63**/20 ≡ **4**/4
- **Farzanegan High School**, NODET (National Organization for Development of Exceptional Talents), Esfahan, Iran
  High School Diploma in Mathematics and Physics *2008 - 2012*

RESEARCH AND WORK EXPERIENCE

- **Researcher at Adanic Software Company** *2016*
  joint research under the supervision of **Professor Amir Haeri**, on predicting bank customer behaviors on a **real** dataset of over 100,000 Iranian bank customers with **over 6,500,000** transactions and growing
  - Customer segmentation based on spending patterns **[ongoing]**
  - Customer churn probability prediction using boosted tress classifiers
  - Community and influential customer detection in a money transfer Network
- **IT Systems Admin at CEIT Computer Site at Amirkabir University of Technology** *Sep 2013 - Jan 2014*

RELEVANT COURSES AND TRAINING

- **Online Course Certificates**: [click to view certificate]
  ColumbiaX - DS101X : Statistical Thinking for Data Science and Analytics
  Microsoft - DAT208x : Introduction to Python for Data Science
- **Tehran University ACM Chapter** *Summer 2016*
  Workshop on Machine Learning, Deep Learning and Big Data
  - **Notable Project:** Object recognition and movement tracking using deep learning (Deeplearning4j)
- **Linux Professional Institute Certificate (LPIC) Training**
  LPIC-2: Training by Iran Linux House (Anissa) *Fall 2014*
  LPIC-1: Training by Metaco Complex *Summer 2014*

[1] Calculated by **WES**

[2] Foundations of Data Mining (18), Principles of Database Design (20), Artificial Intelligence (16), Design of Algorithms (20), Principles of Computer & Programming (20), Advanced Computer Programming (20), Data Structures and Algorithms (19), Microprocessors (20), Electronic Circuits (20), Operating Systems Design (17), Internet Engineering (18.75), Software Engineering (17), Principles of Compiler Design (16)

HONORS AND AWARDS

- **Ranked top 0.006** in the Nationwide University Entrance Exam among all students in Mathemathics and physics (approximately 230,000), 2012
- Participated in Khwarizmi Competitions 2011, **2D Soccer Simulation League**
- Participated in IranOpen RoboCup Competitions 2010, **Junior Soccer League**
- Participated in AUTCUP RoboCup Competitions 2009, **Line Follower League**

TEACHING EXPERIENCE

- **Teaching Assistant, Amirkabir University of Technology**
  - **Principles of Database Design** *Fall 2015*
    Teaching Assistant to Professor Amir Haeri
  - **Principles of Database Design** *Spring 2015*
    Teaching Assistant to Professor Shahriari
  - **Microprocessors** *Fall 2016*
    Teaching Assistant to Professor Homayounpoor
  - **Principles of Computer and Programming (C/C++)** *Fall 2013*
    Teaching Assistant to Professor Poorvatan
- **Voluntary Work with Society of Students Against Poverty**
  Teaching Math and Persian to Underprivileged School Kids *2014*

NOTABLE ACADEMIC PROJECTS

More on my projects on my website

- **Data Mining**
  Forest Cover Type Prediction: comparing different preprocessing techniques and classification algorithms on a dataset of forest cover types from **Kaggle** to utilize an Ensemble in order to label the test dataset (WEKA)
- **Machine Learning**
  Handwritten Digit Recognition: A project I did for Andrew Ng's Machine Learning course on coursera using neural networks (MATLAB)
- **Principles of Database Design**
  Design and implementation: Relational database for a soccer league (MySQL), Non-relational database for a simple social network (MongoDB, JavaScript)
- **Information Storage and Retrieval**
  Implementation of a document retrieval system on more than 1 GB of unstructured text (content-based) (Java)
- **Compiler Design**
  Design and implementation of a compiler for a given grammar which converts programs within that grammar to a compilable C source file (LEX, Yacc, Java)
- **Microprocessors**
  Design, simulation and implementation of an intelligent device with ATMega16 that adjusts lamp brightness according to room brightness
- **Internet Engineering (Web Development)**
  Simple Google+: Client side and server side of a simple social networking website (HTML5, CSS, XML, XSLT, JavaScript, AJAX, PHP, MySQL)
- **Principles of Computer and Programming**
  Scientific Calculator with Adjustable Graph Drawing Option, Multilingual Editor, Tetris (C, C++)
- **Advanced Programming**
  Implementation of a Graphical Networked Multiplayer Maze with Obstacles, River Raid, Tank Trouble (Java)

TECHNICAL SKILLS

- **Database Management Systems:**
  MongoDB, PostgreSQL, MySQL, Microsoft SQL Server
- **Machine Learning & Big Data Tools:**
  GraphLab, MATLAB, Scikit-Learn, Apache Mahout, WEKA
- **Programming & Scripting Languages:**
  Python, C, C++, Java, AVR Assembly, 8086 Assembly, Shell Scripting
- **Compiler Design:**
  Lex, Yacc (bison)
- **Web Development:**
  HTML, CSS, JavaScript, jQuery, XSLT, XML, AJAX, PHP
- **Miscellaneous:**
  ModelSim, Xilinx ISE, CodeVision AVR, ATMEL Studio, Proteus
  Microsoft Office, Microsoft Windows, Microsoft Visual Studio
  Linux (Mint, Ubuntu, Slackware)
  LaTeX

LANGUAGE SKILLS

- **English** : Full Professional Proficiency

  TOEFL iBT Score: **115**/120

  – Reading: **29**/30 – Listening: **30**/30
  – Speaking: **27**/30 – Writing: **29**/30

  GRE General Score:

  – Quantitative Reasoning: **165**/170 (**89%**)
  – Verbal Reasoning: **158**/170 (**80%**)
  – Analytical Writing: **4.5**/6 (**82%**)

- **Persian** (Farsi) : Native

HOBBIES

- Swimming, Cycling, Hiking, Playing the Guitar, Reading novels, Drawing

REFERENCES

- **Professor Amir Haeri**, haeri@aut.ac.ir
- **Professor Homayounpoor**, homayoun@aut.ac.ir
- Others available upon request