Kasra Darvish

Maryland, USA

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Education

Ph.D., Computer Science — **Maryland, USA**
University of Maryland, Baltimore County — *2018-Present*
- Advisor: Professor Cynthia Matuszek
- Research: Cross-Modal Representation Alignment
- GPA: 3.85/4.0

B.Sc., Computer Science — **Tehran, Iran**
Shahid Beheshti University — *2013-2018*
- GPA: 3.78/4.0
- Last 2 years GPA: 3.92/4.0

Technical Skills

- **Programming and Tools**:
  - Python, Java, C++, C
  - PyTorch, OpenCV
  - LaTeX, Ipe
  - MATLAB, Prolog
  - HTML, CSS, JavaScript
  - Vim, Emacs, Docker
- **Operating Systems**: Mac OS X, GNU/Linux

Honors and Awards

- **Morgan Stanley scholarship recipient as a Data Science researcher** — **Maryland, USA**
  University of Maryland, Baltimore County — *2018-2019*

- **Ranked as top 1% among computer science students** — **Tehran, Iran**
  Shahid Beheshti University — *2018*

- **Selected as one of the top 5 students** — **Iran**
  Nationwide Computer Science Olympiad — *2017*

- **Exempted from M.Sc. university entrance exam as an exceptional-talent student** — **Iran**
  2017

- **Ranked as top 1% among more than 250,000 students** — **Iran**
  National Universities Entrance Exam — *2013*

Notable Projects

- *A Convolutional Neural Network (**CNN**) for gender and race detection based on face images in **Python***

- ***Pedestrian Detection** using Support Vector Machine and Histogram of Oriented Gradients in **MATLAB***

- *An adversarial **2D game** in **C++** with **minimax** algorithm for the agent*

- *A talk on **Principal Component Analysis (PCA) and Eigenface** at Shahid Beheshti University*

- ***Ball Mania**, a **2D game** developed in **C++** using its graphic library*

- **The Chromatic Art Gallery Problem** *for specific type of polygons*

- **Genetic algorithm** *to solve a modified version of the* **maze problem** *in which we have to put different shapes of pipes in each cell to convey the water from source to destination*

- **Prolog** *program to solve Einstein's riddle*

Research Experience

- **Research Assistant, Robotics and Machine Learning**   **Prof. Cynthia Matuszek**
University of Maryland, Baltimore County   *Feb. 2019 - Present*

- **Research Assistant, Deep Learning**   **Prof. Hadi Farahani**
Shahid Beheshti University   *Nov. 2017 - May 2018*

- **Research Assistant - Computational Geometry Laboratory**   **Prof. Farnaz Sheikhi**
Shahid Beheshti University   *Feb. 2017 - May 2018*

- **Disease detection by processing iris image**   **Prof. Alireza Tavakoli**
Shahid Beheshti Univeristy   *May 2017 - July 2017*

Teaching Exprience

- **Teaching Assistant, Algorithms**   **Prof. Paul Burkhardt**
University of Maryland, Baltimore County   *Jan. 2019 - May 2019*

- **Teaching Assistant, Algorithms**   **Prof. Christopher Marron**
University of Maryland, Baltimore County   *Sept. 2018 - Dec. 2018*

- **Teaching Assistant, Computational Geometry**   **Prof. Farnaz Sheikhi**
Shahid Beheshti University   *Sept. 2017 - Jan. 2018*

- **Teaching Assistant, Compiler Theory**   **Prof. Adel Hosseini**
Shahid Beheshti University   *Sept. 2017 - Jan. 2018*

- **Teaching Assistant, Automata Theory**   **Prof. Hadi Farahani**
Shahid Beheshti University   *Feb. 2016 - July 2016*

- **Teacher, Mathematics**   **Tehran, Iran**
Mahde Danesh High School   *2013 - 2016*

Memberships and Services

- **IOI Office Member**   **Tehran, Iran**
The 29th International Olympiad in Informatics   *Aug. 2017*

- **Executive Director of "Pardazeh"**   **Tehran, Iran**
The Scientific Journal of Computer Science Association, SBU   *Sept. 2014 - Nov. 2015*

Research Interests

- Artificial Intelligence, Robotics
- Computer Vision, NLP
- Algorithms, Computational Geometry
- Deep Learning, Machine Learning

Languages

- **Persian (Farsi)**: Native
- **English**: Fluent

○ **Spanish**: Beginner ○ **Arabic**: Intermediate

Other Skills

○ Piano: Intermediate ○ Soccer: Professional player