

Kasra Darvish

Maryland, USA

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Education

Ph.D., Computer Science

University of Maryland, Baltimore County

- Advisor: Professor Cynthia Matuszek • Research: Socially Assistive Robotics
- GPA: 3.85/4.0

Maryland, USA

2018-Present

B.Sc., Computer Science

Shahid Beheshti University

- GPA: 3.78/4.0 • Last 2 years GPA: 3.92/4.0

Tehran, Iran

2013-2018

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 for doing research focused on Data Science

University of Maryland, Baltimore County

Maryland, USA

2018-2019

• Ranked as top 1% among computer science students

Shahid Beheshti University

Tehran, Iran

2018

• Selected as one of the top 5 students

Nationwide Computer Science Olympiad

Iran

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

National Universities Entrance Exam

Iran

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

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|---|--|
| • Research Assistant, Robotics and Machine Learning
<i>University of Maryland, Baltimore County</i> | Prof. Cynthia Matuszek
<i>Feb. 2019 - Present</i> |
| • Research Assistant, Deep Learning
<i>Shahid Beheshti University</i> | Prof. Hadi Farahani
<i>Nov. 2017 - May 2018</i> |
| • Research Assistant - Computational Geometry Laboratory
<i>Shahid Beheshti University</i> | Prof. Farnaz Sheikhi
<i>Feb. 2017 - May 2018</i> |
| • Disease detection by processing iris image
<i>Shahid Beheshti University</i> | Prof. Alireza Tavakoli
<i>May 2017 - July 2017</i> |

Teaching Experience

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| • Teaching Assistant, Algorithms
<i>University of Maryland, Baltimore County</i> | Prof. Paul Burkhardt
<i>Jan. 2019 - May 2019</i> |
| • Teaching Assistant, Algorithms
<i>University of Maryland, Baltimore County</i> | Prof. Christopher Marron
<i>Sept. 2018 - Dec. 2018</i> |
| • Teaching Assistant, Computational Geometry
<i>Shahid Beheshti University</i> | Prof. Farnaz Sheikhi
<i>Sept. 2017 - Jan. 2018</i> |
| • Teaching Assistant, Compiler Theory
<i>Shahid Beheshti University</i> | Prof. Adel Hosseini
<i>Sept. 2017 - Jan. 2018</i> |
| • Teaching Assistant, Automata Theory
<i>Shahid Beheshti University</i> | Prof. Hadi Farahani
<i>Feb. 2016 - July 2016</i> |
| • Teacher, Mathematics
<i>Mahde Danesh High School</i> | Tehran, Iran
<i>2013 - 2016</i> |

Memberships and Services

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| • IOI Office Member
<i>The 29th International Olympiad in Informatics</i> | Tehran, Iran
<i>Aug. 2017</i> |
| • Executive Director of "Pardazeh"
<i>The Scientific Journal of Computer Science Association, SBU</i> | Tehran, Iran
<i>Sept. 2014 - Nov. 2015</i> |

Research Interests

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

Languages

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| ○ Persian (Farsi): Native | ○ English: Fluent |
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- **Spanish:** Beginner

- **Arabic:** Intermediate

Other Skills

- Piano: Intermediate

- Soccer: Professional player