

Kasra Darvish

Maryland, USA

✉ kasradarvish@umbc.edu • 🌐 www.kasraprime.com

Education

Ph.D., Computer Science

University of Maryland, Baltimore County

- Advisor: Professor Cynthia Matuszek • Research: Cross-Modal Learning
- GPA: 3.83/4.0

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, C++, Java, C
- PyTorch, OpenCV
- MATLAB, Prolog
- HTML, CSS, JavaScript
- \LaTeX , Ipe
- Vim, Docker

• Operating Systems: Mac OS X, GNU/Linux

Honors and Awards

• Morgan Stanley scholarship recipient as a Data Science researcher

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

- **Research Assistant, Robotics and Machine Learning**

University of Maryland, Baltimore County

Prof. Cynthia Matuszek

Feb. 2019 - Present

- **Research Assistant, Deep Learning**

Shahid Beheshti University

Prof. Hadi Farahani

Nov. 2017 - May 2018

- **Research Assistant - Computational Geometry Laboratory**

Shahid Beheshti University

Prof. Farnaz Sheikhi

Feb. 2017 - May 2018

- **Disease detection by processing iris image**

Shahid Beheshti University

Prof. Alireza Tavakoli

May 2017 - July 2017

Teaching Experience

- **Teaching Assistant, Algorithms**

University of Maryland, Baltimore County

Prof. Paul Burkhardt

Jan. 2019 - May 2019

- **Teaching Assistant, Algorithms**

University of Maryland, Baltimore County

Prof. Christopher Marron

Sept. 2018 - Dec. 2018

- **Teaching Assistant, Computational Geometry**

Shahid Beheshti University

Prof. Farnaz Sheikhi

Sept. 2017 - Jan. 2018

- **Teaching Assistant, Compiler Theory**

Shahid Beheshti University

Prof. Adel Hosseini

Sept. 2017 - Jan. 2018

- **Teaching Assistant, Automata Theory**

Shahid Beheshti University

Prof. Hadi Farahani

Feb. 2016 - July 2016

- **Teacher, Mathematics**

Mahde Danesh High School

Tehran, Iran

2013 - 2016

Memberships and Services

- **IOI Office Member**

The 29th International Olympiad in Informatics

Tehran, Iran

Aug. 2017

- **Executive Director of "Pardazeh"**

The Scientific Journal of Computer Science Association, SBU

Tehran, Iran

Sept. 2014 - Nov. 2015

Research Interests

○ Artificial Intelligence, Robotics

○ Computer Vision, NLP

○ Algorithms, Computational Geometry

○ Deep Learning, Machine Learning

Languages

○ **Persian (Farsi):** Native

○ **Spanish:** Beginner

○ **English:** Fluent

○ **Arabic:** Intermediate

Other Skills

○ Piano: Intermediate

○ Soccer: Professional player