Mahla Nejati

Contact Information

Room 805 Robot Perception Lab

Department of Computer Engineering Ferdowsi University of Mashhad

Mashhad, Khorasan Razavi State, Iran

Date of Birth: February 27th 1990

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Education

- B.Sc. in Computer Engineering-Software, Ferdowsi University of Mashhad, 2008-2013
 - Overall GPA: 17.05/20 (last two years GPA: 18.00/20)
 - Supervisor: <u>Prof. Ahad Harati</u>

Thesis title: "Generating a software for representing Kinect RGB-D data and detection primary objects and their borders by several algorithms by Point Cloud Library (PCL)"

- Top Student
 - Computer Foundation and Programming
 - Microprocessors I
 - Computer Organization and Language
 - Artificial Intelligence
 - General Mathematics I
 - Advanced Programming
- M.Sc. in Artificial Intelligence, Ferdowsi University of Mashhad, 2013-2015
 - o Overall GPA: 17.73/20
 - Supervisor: <u>Prof. Ahad Harati</u>

Thesis title: "RGB-D Data Inpainting Using Markov Random Field"

- Top Student
 - Image Processing
 - Advanced Artificial Intelligence
 - Neural Networks
 - Structural pattern Recognition

Skills

- Computer:
 - **Programming Languages:** C/C++, C#, Assemly (X86), HTML, PHP, AJAX, OpenGL, Prolog, PCL, Matlab
 - o Database: SQL Server, MySQL
- Language:
 - o Persian: Native
 - o English: Fluent (IELTS: R:7 L:6 S:7.5 W:6 Overall:6.5)
 - o Arabic: Familiar

Research Interests

- Probabilistic graphical model
- Artificial Intelligence and robotics
- Machine vision and image processing on RGB-D data
 - ✓ Denoising and inpainting
 - ✓ Segmentation
 - ✓ Object detection
 - ✓ Markov Random Field in computer vision
- Graph Theory
- Problem Solving Strategies
- Sparse representation

Technical And Research Experience

- I was a part of the research group on microprocessor and published our research on ESCAPE Computer Scientific Magazine, Ferdowsi University of Mashhad, summer 2010.
- Ferdowsi University Internship Center, Mashhad, Iran Develop management software using C# and SQL Server, summer 2011.
- Worked on optimization methodology for selecting suppliers by genetic algorithm, fall 2013.
- Research on Curvelet transform, spring 2014.
- Research on Image Segmentation and Smoothing RGB-D data by approximate surface reconstruction, spring 2014.
- Research on denoising RGB-D data by bilateral filtering, fall 2013.
- Research on window detection in building façade of LIDAR data

Membership

- Scientific Society of Computer Engineering, 2010-2011
 - Ferdowsi Game Programming Contest, Program Committee 2010-2011
- Ferdowsi ACM Scientific Committee, 2013-2015
 - Head of Scientific Committee of Ferdowsi Collegiate Programming Contest(FCPC)-2015
 - Problem setter of Ferdowsi Collegiate Programming Contest (FCPC) and practicing ACM/ICPC competitions, (2014-2015)
 - Problem setter and judge of internal and Qualification for ICPC contests, 2014
 - Teaching Problem solving Strategies, 2013
- Ferdowsi ACM Executive Committee, 2010-2015
 - Judge of Ferdowsi Collegiate Programming Contest (FCPC) and practicing ACM/ICPC competitions, 2014-2015.
- Ferdowsi University Teacher Assistants Qualifier Committee, 2013-2015
- Executive committee, 3rd International Conference on Computer and Knowledge Engineering (ICCKE 2014), Ferdowsi University of Mashhad, 2014
- Intelligent Systems Scientific Society of Iran (ISSSI), 2014
- Robotics Perception Lab, 2012-Now

Teaching Experience

- **Teaching Assistant,** Electrical Circuits -1, Spring 2010
- Teaching Assistant, Algorithm Design, Fall 2011
- **Teaching Assistant,** Artificial Intelligence, 2012-2015 (5 Semester)
- Teaching Assistant, Advanced Artificial Intelligence, 2015
- **Teaching Assistant,** Compiler Design Concepts, 2014-2015(2 Semester)
- **Teaching,** Problem Solving Strategies, Ferdowsi University of Mashhad, Fall 2013
- Teaching, Image processing, Ferdowsi University of Mashhad, Winter 2015
- **Seminar,** Introduction to Kinect and its applications, Ferdowsi University of Mashhad, Spring 2012
- **Seminar,** Curvelet transform, Ferdowsi University of Mashhad, 2Hrs, 2014
- Seminar, Etics in robotics, Ferdowsi University of Mashhad, 3Hrs, 2014
- **Seminar,** Image understanding using Markov random field, Ferdowsi University of Mashhad, 2014

Honors and Awards

- 1st place, ACM CCC2012 Programming contest as contestant, Islamic Azad University of Mashhad, 2012.
- 1st place, ACM Quchan regional programming contest as contestant, Quchan University of Advanced Technologies Engineering, 2012.
- **2nd place,** ACM FCPC2012 programming contest as contestant, Ferdowsi University of Mashhad, 2012.
- **9th place,** ICPC2012 programming contest as contestant, Asia Regional, Sharif University of Technology, 2012.
- **3**rd **place**, Qualification for ICPC National programming contest as contestant, Ferdowsi University of Mashhad, 2012.
- **3**rd **place,** Qualification for ICPC National Programming contest as contestant, Ferdowsi University of Mashhad, 2013.
- 1st place, Qualification for international Robocop IranOpen competitions as contestant, Research center of Bojnourd, 2007.
- 3rd student among undergraduate students of year 2008-2009.
- 3rd student among undergraduate students of year 2009-2010.
- **Top student** among undergraduate students of year 2011-2012.
- Ranked among the **top 0.8%** of about half a million participants in the Iranian University Entrance Exam, 2008.
- Ranked among the **top 1%** of about 19000 graduated participants in national M.S. computer engineering exam, 2012.
- Ranked among the **top 1%** of about 5000 graduated participants in national M.S. computer science exam, 2012.

References

- <u>Prof. Ahad Harati</u>, Assistant Professor, Ph.D. in Computer Engineering, ETH, Zurich, Switzerland, 2008
- <u>Prof. Hamidreza Pourreza</u>, Associate Professor, Ph.D. in Computer Engineering, Tehran, Iran 2003
- <u>Prof. Saeid Abrishami</u>, Assistant Professor, Ph.D. in Computer Engineering, Ferdowsi University of Mashhad, Iran 2011
- <u>Dr. Samad Paydar</u>, Assistant Professor, Ph.D. in Computer Engineering, Ferdowsi University of Mashhad, Iran 2014.