Mohammad Moghimi

Curriculum Vitae

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Professional Experiences

2024–Now **Technical Lead Software Engineer**, ***Google DeepMind***, *San Diego, CA.*
Gemini Health. I lead the evaluation of the Gemini Health agent.

2019–2024 **Technical Lead Software Engineer**, ***Google Research***, *Seattle, WA and San Diego, CA.*
Technical Lead for various Machine Learning projects:
- LLM Memory. I worked on core-memory technology to augment transformers. We focused on medical data sets to test our technology.
- Multimodal understanding. I led the development of self-supervised feature learning to reduce data labeling for model training for Fitbit.

2018–2019 **Manager, Deep Learning**, ***Zillow Inc***, *Seattle, WA.*
Managing a team of researchers and engineers working on a variety of Computer Vision and Deep Learning projects such as Visual home value estimation (Zesimate) and Visual document understanding

2016–2017 **Senior Data Scientist**, ***Zillow Inc***, *Seattle, WA.*
I developed first in-kind deep learning models for visual home price estimation

2015–2016 **Researcher/Remote**, **Yahoo Research**, Sunnyvale, CA.
Research on using boosting techniques to train Deep Convolutional Networks.

2013 **Software Engineering Intern**, *AI Group /FAIR,* ***Facebook Inc***, *Menlo Park, CA.*
I developed the first deep convolutional object recognition models at Facebook.

2012 **Software Engineering Intern**, *Google Goggles,* ***Google Inc***, *Los Angeles, CA.*
Object detection based on Fisher Vectors and contributions to learning model parallelization

2009 **Research Intern**, ***Max Planck*** *Institute for Biological Cybernetics, Tübingen, Germany.*

Education

2010–2016 **PhD in Computer Science (Computer Vision)**, ***Cornell University***, Ithaca, NY.
Advisor: Prof. **Serge Belongie**
Research: Computer Vision for Life-logging
Transferred from **UC San Diego** (2010–2014) to Cornell University.

2007–2010 **MSc in Computer Engineering (Artificial Intelligence)**, *Sharif University of Technology*, Tehran, Iran.
Research: Visual Object Recognition

2003–2007 **BSc in Computer Engineering (Software Engineering)**, *University of Tehran*, Tehran, Iran.

Awards and Honors

2010 **UCSD CSE Department Fellowship**, *UCSD fellowship for the academic year of 2010-2011.*

2009 **Telecommunication Research Center (ITRC) Research Grant**, *awarded to my Masters thesis.*

2008 **3rd Team Rank**, *10th Asia Regional ACM Programming Contest along with the "Until The Last Moment" team members, 109 teams participated.*

2008 **1st Rank**, *Achieving the highest GPA among all university Computer Engineering graduate students.*

2007 **Silver Medal**, 12th *National Collegiate Scientific Olympiad in Computer Engineering.*

2007 **1st Rank**, *Nationwide M.Sc. entrance exam in Computer Engineering-Artificial Intelligence of Iranian Universities.*

2004 **2nd Rank**, *F.O.E (Faculty of Engineering) 2nd Award for achieving the second best GPA among all university Computer Engineering students.*

2002 **Bronze Medal**, *19th Iran National Mathematics Olympiad (IMO), Young Scholars Club (YSC), Tehran.*

Other Experiences

2016 **Program Committee**, *4th Workshop on Egocentric (First-Person) Vision, Las Vegas, NV.*

2011-2014 **Coach**, *Coaching UCSD ACM/ICPC programming team which advanced to the world finals in 2011.*

2013 **Organizer**, *Workshop on Wearable Computer Vision Systems 2013, Sydney, Australia.*

2006-2008 **Problem Setter and Judge**, *Problem Setter and Judge of the 3rd, 4th and 5th HelliNet Programming Tournament.*

2005-2007 **Problem Setter and Judge**, *Problem Setter and Judge of University of Tehran's Local Weekly ACM Programming Contests.*

2004-2005 **ACM Officer**, *Head of ACM Student Chapter of University of Tehran.*

2001-2002 **Network Administrator**, *Administration of Allameh Helli's Computer Site.*

Patents

2017 **M. Moghimi**, D. Fagnan, S. Humphries, N. Stevens, J. Thind, W. Fedus, "Machine Learning Techniques to Construct and Apply Home Valuation Models That Take Into Account Information Derived From Photographs of Homes", filed

Publication

2019 **M. Moghimi**, P. Li, D. Fagnan, "Convolutional Random Forest", submitted to *IEEE Computer Vision and Pattern Recognition Conference (CVPR 2019)*

2016 **M. Moghimi**, M. Saberian, et, al., "Boosfv ted Deep Convolutional Neural Networks", *British Machine Vision Conference 2016 (BMVC 2016)*

2015 **M. Moghimi**, J. Kerr, E. Johnson, S. Godbole, S. Belongie, "Discriminative Regions: A Substrate for Analyzing Life-logging Image Sequences", *The 21st International Conference on MultiMedia Modeling (MMM 2015)*

2014 **M. Moghimi**, et. al, "Classifying Physical Activity and Sedentary Behavior in Life-logging Images", *Proceedings of International Conference on Image Processing (ICIP 2014)*

2014 **M. Moghimi**, P. Azagra, L. Montesano, A. C. Murillo, S. Belongie, "Experiments on an RGB-D Wearable Vision System for Egocentric Activity Recognition", *CVPRW 2014*

2014 H. Altwaijry, **M. Moghimi**, S. Belongie, "Discriminative Regions: A Substrate for Analyzing Life-logging Image Sequences", *IEEE Winter Conference on Applications of Computer Vision (WACV 2014)*

2012 **M. Moghimi**, J. Venkatesh, P. Zappi, T. Simunic Rosing, "Context Aware Power Management for Smartphones Using Fuzzy Expert System", *Fourth International Conference on Mobile Computing, Applications and Services (MobiCASE 2012)*

2010 A. Ghodrati, **M. Moghimi Najafabadi**, S. Kasaei, "Human Action Categorization Using Weighted Spatiotemporal Features", *18th Iranian Conference on Electrical Engineering (ICEE 2010)*

2008 M. Babaeizadeh, **M. Moghimi Najafabadi**, "Content-Aware Image Resizing Based on Color", *Proc. of Fifth Iranian Conference on Machine Vision and Image Processing (MVIP 2008)*

2007 **M. Moghimi Najafabadi**, M. Zali: "Defining Reinforcement Learning Problem to Solve Static Multi Processor Task Scheduling", *accepted by The International Conference on Intelligent Systems Design and Applications (ISDA 2007)*

2007 M. Zali , **M. Moghimi Najafabadi**, M. Salmani Jelodar, "Task Scheduling in Multi-Processor Systems Using Genetic Algorithm and Reinforcement Learning", *Proc. of 12th International CSI Computer Conference*

2007 **M. Moghimi Najafabadi**, M. Zali, F. Taghiyareh and S. Taheri: "Static Task Scheduling Using Genetic Algorithm and Reinforcement Learning", *Proc. of IEEE Symposium on Computational Intelligence in Scheduling (CI-Sched 2007)*

2006 **M. Moghimi Najafabadi** and C. Lucas: "Evolving Artificial Neural Networks for Prediction in Robocup Soccer", *Proc. of Ninth Scientific Computing in Electrical Engineering (SCEE2006), Tehran, Iran, September 2006*