

Maria Sargsyan

Experience

Working Experience

June 2018 - **Consultant**, *Wolfram Mathematica*, Yerevan, Armenia.

Present Projects Involved (projects are connected to converting Neural Networks from different frameworks to Wolfram Language Neural Networks format):

- Squeeze and Excitation Neural Net from Caffe to WNet
- Arbitrary-Oriented Scene Text Detection via Rotation Proposals from Caffe to WNet.
- ForkNet Brain Segmentation Net
- Micro Aerial Vehicle Trail Navigation Nets from Caffe to WNet.
- Pose-Aware Face Recognition in the Wild Nets
- ResNet-101 for 3D Morphable Model Regression
- Contributed for converting YOLO V3 Trained on Open Images Data and SSD-MobileNet V2

January 2017 **Junior Data Scientist**, *PicsArt Inc*, Yerevan, Armenia.

- August 2017 Projects involved:

- Clustering analysis : user profiles clustering (based on photos and tags), item clustering (e.g photo clustering)
- Similarity analysis (finding the most similar item to the given one).
- User Recommendation (news recommendation, item recommendation)
- Churn Analysis (building a prediction model which allowed to identify which factors are mostly responsible for user's retention)
- Image Tagging
- Image Feature Extraction (building classical Autoencoder)

July 2016- **Data Science Intern**, *PicsArt Inc*, Yerevan, Armenia.

January 2017

Research Experience

August 2015- **Research Paper**, *Working on a team research paper assigned by Prof. Diogo Gomes*, KAUST, Jeddah.

September Thuwal, Makkah Province, Saudi Arabia.

2015 (Almayouf, Nojood, et al. "Existence of positive solutions for an approximation of stationary mean-field games." *Involve, a Journal of Mathematics* 10.3 (2016): 473-493.)

Technical skills

Languages Python , R, HTML, LaTeX, SQL, Spark SQL

Frameworks Tensorflow , Git, PyTorch, Caffe

Design Creo Parametric
softwares

Education

2018 - **Master in Mathematics and Computer Science**, *Saarland University*, Germany, Saarland.

Present Saarbrücken

2014-2017 **Bachelor of Science in Computer Science. Track: Math Modeling Applications**, *American University of Armenia*, Yerevan.

2013-2014 **Bachelor of Business**, *American University of Armenia*, Yerevan.

2010-2012 **High School #29 after Andranik Margaryan**, *Armenia*, Yerevan.

2002-2010 **School # 1 after Y.G. Sozonov**, *Russia*, Khanty-Mansiysk.

Student Exchange Programs and Trainings

April 2016 - **Machine learning Training organized by PicsArt, Inc.**, *Armenia*, Yerevan.

July 2016 The training was organized to gather new interns. As a result, I got a position of Data Scientist Intern. During the training, participants learned and implemented classical ML algorithms in Supervised and Unsupervised Learning

August 2015 - **Visiting Research Student Program**, *KAUST (King Abdullah University of Science and Technology)*, Jeddah,
September Thuwal, Makkah Province, Saudi Arabia.

2015 The summer camp on Applied Differential Equations comprised three closely related modules:

- Ordinary differential equations
- Numerical Methods
- Mathematical Modeling

June 2015 **Summer School in Mathematics and Applications**, *YSU*, Armenia, Yerevan.

June 2014 **Summer School in Mathematics and Applications**, *YSU*, Armenia, Yerevan.