Please do the following steps:

1. Send the following information to nakajima@tu-berlin.de **(by 17.11.2017)**.
   - Full name
   - Matr. No.
   - Email address
2. The paper list will be complete and available on the wiki page (`http://wiki.ml.tu-berlin.de/wiki/Main/WS17_MLDM`) **by 20.11.2017**.
3. Let me know your choice of paper by email **(by 24.11.2017)**.
4. Prepare slides for your talk (ca 15-20min) in the block-seminar **on 25.1.2018.**
5. Attend the block-seminar, give your talk, discuss on other's talks!

Below is the list of papers:

1 Hashing

- M. Datar, N. Immorlica, P. Indyk, V.S. Mirrokn, "Locality-sensitive hashing scheme based on p-stable distributions," In SCG, pages 253–262, 2004.
- Prateek Jain, Sudheendra Vijayanarasimhan, Kristen Grauman, "Hashing Hyperplane Queries to Near Points with Applications to Large-Scale Active Learning."
- P. Li, M. Mitzenmacher, A. Shrivastava, "Coding for Random Projections."

2 Data Structure

- A. Beygelzimer, S. Kakade, J. Langford, "Cover trees for nearest neighbor," ICML 2006.
- O. Sener, S. Savarese "Active Learning for Convolutional Neural Networks: A Core-set Approach," arXiv:1708.00489.

3 Parallel computing

- A. Krizhevsky, "One weird trick for parallelizing convolutional neural networks."
- T. D. Kim and S. Choi, "Scalable Variational Bayesian Matrix Factorization with Side Information," AISTATS 2016.

4 Cluster Computing Framework

- P. Carbone, S. Even, S. Haridi, "Apache Flink: Unified stream and batch processing in a single engine."
- Ghoting, A., Krishnamurthy, R., Pednault, E., Reinwald, B., Sindhwani, V., Tatikonda, S., ... and Vaithyanathan, S., "SystemML: Declarative machine learning on MapReduce," In 2011 IEEE 27th International Conference on Data Engineering (pp. 231-242).
- Chen, T., Li, M., Li, Y., Lin, M., Wang, N., Wang, M., ... and Zhang, Z., " Mxnet: A flexible and efficient machine learning library for heterogeneous distributed systems," arXiv preprint arXiv:1512.01274, 2015.

5 Stochastic Gradient

- S. L. Smith, P.-J. Kindermans, Q. V. Le, "Don't Decay the Learning Rate, Increase the Batch Size," arXiv:1711.00489, 2017.
- Tianqi Chen, Emily B. Fox, Carlos Guestrin, "Stochastic Gradient Hamiltonian Monte Carlo."
- Y. Li, J.M. Hernandez-Lobato, R.E. Turner, "Stochastic Expectation Propagation," NIPS 2015.
- M.E. Khan, P. Baque, F. Fleuret, P. Fua, "Proximal Variational Inference," NIPS 2015.

6 Randomized Algorithms

- N. B. Erichson, S. Voronin, S. L. Brunton, J. N. Kutz, "Randomized Matrix Decompositions using R," arXiv:1608.02148, 2017.

7 Deep Learning

- A. Nguyen, et al., "Plug & Play Generative Networks: Conditional Iterative Generation of Images in Latent Space."
- A. Frome et al., "A Deep Visual-Semantic Embedding Model." NIPS 2013.
- L. A. Gatys et al, "A Neural Algorithm of Artistic Style," arXiv:1508.06576, 2015.
- D. P. Kingma, M. Welling, "Auto Encoding Variational Bayes."
- G. Alain, Y. Bengio, "What Regularized Auto-encoders Learn from the Data Generating Distribution," Journal of Machine Learning Reserach, 15, 3743-3773, 2014.
- H. He, B. Xin, D. Wipf, "From Bayesian Sparsity to Gated Recurrent Nets," arXiv:1706.02815, Accepted for oral presentation in NIPS 2017.

8 Extreme Classification

- K. Bhatia et al., "Sparse Local Embeddings for Extreme Multi-label Classification," NIPS 2015.

9 Model Compression

- Han et al., "Deep Compression: Compressing Deep Neural Networks with Pruning, Trained Quantization and Huffman Coding," arXiv:1510.00149, 2016

10 Explanation

- Goodfellow et al., "Explaining and Harnessing Adversarial Examples."
- E. Strumbelj, I. Kononenko, "An Efficient Explanation of Individual Classifications using Game Theory."
- L. M. Zintgraf et al., "Visualizing Deep Neural Network Decisions: Prediction Difference Analysis."

11 Kernel Approximation

- Rahimi and Recht, "Weighted Sum of Random Kitchen Sinks."