Please do the following:

1. Choose a paper from the paper list below.
2. Send the following information to nakajima@tu-berlin.de **(by 20.11.2019)**.
   - Full name
   - Affiliation (University, Department, master/bachelor)
   - Matr. No.
   - Email address
   - The paper title of your choice

   I'll assign an adviser to each student and let you know her/his email address **(by 22.11.2019)**.
3. Contact your adviser for a meeting asap (some advisers could take a long vacation).
4. Prepare slides for your talk (ca 15-20min) in the block-seminar **on 24.1.2020.**
5. Attend the block-seminar, give your talk, discuss on other's talks!

Below is the list of papers:

1 Data Structure/Indexing

- 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," 2010.
- P. Li, M. Mitzenmacher, A. Shrivastava, "Coding for Random Projections," 2014
- M. Drosou, E. Pitoura, " Diverse set selection over dynamic data. IEEE Transactions on Knowledge and Data Engineering," 26(5):1102–1116, 2014.

2 Parallel Computation

- McMahan et al., "Communication-Efficient Learning of Deep Networks from Decentralized Data," arXiv:1602.05629, 2016.
- Hasenclever et al., "Distributed Bayesian Learning with Stochastic Natural-gradient Expectation Propagation and the Posterior Server, " 2017.

3 Deep Learning

- S. Santurkar,et al., "How Does Batch Normalization Help Optimization?" arXiv:1805.11604, 2018.
- Kang et al., "Contrastive Adaptation Network for Unsupervised Domain Adaptation," CVPR 2019.
- Y. Bengio et al., "A Neural Probabilistic Language Model" Journal of Machine Learning Research, Vol..3, 1137–1155, 2003.
- Zhu et al., "Unpaired Image-to-Image Translation using Cycle-Consistent Adversarial Networks," ICCV 2017.

4 Generative Models

- D. P. Kingma, M. Welling, "Auto Encoding Variational Bayes," 2014
- G. Alain, Y. Bengio, "What Regularized Auto-encoders Learn from the Data Generating Distribution," Journal of Machine Learning Reserach, 15, 3743-3773, 2014.
- van den Oord et al, "Pixel Recurrent Neural Networks," arXiv:1601.06759, 2016
- Laurent Dinh, David Krueger, Yoshua Bengio, "NICE: Non-linear Independent Components Estimation," ICLR workshop 2015, arXiv:1410.8516 [cs.LG]
- Taesup Kim, Yoshua Bengio, "Deep Directed Generative Models with Energy-Based Probability Estimation," arXiv:1606.03439, 2016
- Nowozin et al, "f-GAN: Training Generative Neural Samplers using Variational Divergence Minimization," NIPS 2016

5 Adversarial Attack/Defense

- I. J. Goodfellow, J. Shlens, and C. Szegedy, "Explaining and harnessing adversarial examples," arXiv preprint arXiv:1412.6572, 2014.
- A. Madry, A. Makelov, L. Schmidt, D. Tsipras, and A. Vladu, "Towards deep learning models resistant to adversarial attacks," arXiv preprint arXiv:1706.06083, 2017.
- P. Samangouei, M. Kabkab, and R. Chellappa, "Defense-gan: Protecting classifiers against adversarial attacks using generative models," in International Conference on Learning Representations, vol. 9, 2018.
- Athalye, N. Carlini, and D. Wagner, "Obfuscated gradients give a false sense of security: Circumventing defenses to adversarial examples," arXiv preprint arXiv:1802.00420, 2018.

6 Anomaly Detection, Uncertainty Estimation

- Eric Nalisnick et al, "DO DEEP GENERATIVE MODELS KNOW WHAT THEY DON'T KNOW?" ICLR 2019.
- Y. Gal, Z. Ghahramani, "Dropout as a Bayesian Approximation: Representing Model Uncertainty in Deep Learning," ICML2016.

7 Scalable Bayesian Learning

- Masegosa et al., "Probabilistic models with deep neural networks," arXiv:1908.03442, 2019.
- Regli et al, "Alpha-Beta Divergence For Variational Inference," arXiv:1805.01045, 2018.
- Diederik P. Kingma, Tim Salimans, Max Welling, "Variational Dropout and the Local Reparameterization Trick," NIPS2015.
- H. He, B. Xin, D. Wipf, "From Bayesian Sparsity to Gated Recurrent Nets," arXiv:1706.02815, Accepted for oral presentation in NIPS 2017.
- T. D. Kim and S. Choi, "Scalable Variational Bayesian Matrix Factorization with Side Information," AISTATS 2016.

8 Model Compression

- Dmitry Molchanov, Arsenii Ashukha, Dmitry Vetrov, "Variational Dropout Sparsifies Deep Neural Networks," ICML2017.

9 Kernel Approximation

- Si, Hsieh, Dhillon , "Memory Efficient Kernel Approximation," Journal of Machine Learning Research, vol.18, pp.1-32, 2017.
- Rahimi and Recht, "Weighted Sum of Random Kitchen Sinks."