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| Sasho Nedelkoski | |  | | **Contact details:**  TEL 1209, TU Berlin [nedelkoski@tu-berlin.de](mailto:nedelkoski@tu-berlin.de) |
| **Education** | | | | |
| Berlin, Germany | **Technische Universität Berlin** | | October 2018 –  April 2021 | |
| * Ph.D. in Computer Science, supervised by Prof. Dr. Odej Kao. * Summa cum laude (with distinction) * Thesis title: “Deep Anomaly Detection in Distributed Software Systems” | | | | |
| Berlin, Germany | **Technische Universität Berlin** | | October 2017 –  September 2018 | |
| * M.Sc. in Computer Science – Faculty of Electrical Engineering and Computer Science, Technische Universität Berlin, Germany. GPA: 1.0 (scale from 4.0-worst to 1.0-best) * Thesis title: “Event-generated Time Series Anomaly Detection using Deep Learning” * Best student award from Association of German Engineers (VDI) * Best student and master thesis from TUB | | | | |
| Skopje, Macedonia | **Ss. Cyril and Methodius University** | | September 2013 –  June 2017 | |
| * B.Sc. in Electrical Engineering and Information Technologies in Computer Technologies and Engineering, Faculty of Electrical Engineering and Information Technology, Ss. Cyril and Methodius University, Skopje, Macedonia. GPA: 9.93 (scale from 5-worst to 10-best). * Thesis title: Lung Cancer Detection using Deep Learning. * Best student award (2013/2014, 2014/2015, 2015/2016 and 2016/2017 academic year). | | | | |
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| **Research Highlights** | | | | |
| 1. **Sasho Nedelkoski**, Jasmin Bogatinovski, Alexander Acker, Jorge Cardoso, and Odej Kao. “Self-Attentive Classification-Based Anomaly Detection in Unstructured Logs.” In Proceedings of the 20th IEEE Interna-tional Conference on Data Mining (ICDM2020). 2020. 2. **Sasho Nedelkoski**, Jasmin Bogatinovski, Alexander Acker, Jorge Cardoso, and Odej Kao. “Self-Supervised Log Parsing.” In Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD2020). 2020. 3. **Sasho Nedelkoski**, Jasmin Bogatinovski, Jorge Cardoso, and Odej Kao. “Anomaly Detection in Distributed Traces Needs Attention.” In Proceedings of the 13th IEEE/ACM International Conference on Utility and Cloud Computing (UCC2020). 2020. 4. **Sasho Nedelkoski**, Jorge Cardoso, and Odej Kao. “Anomaly Detection and Classification using Distributed Tracing and Deep Learning.” In Proceedings of the 19th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID). 2019. 5. **Sasho Nedelkoski**, Jorge Cardoso, and Odej Kao. “Anomaly Detection from System Tracing Data Using Multimodal Deep Learning.” In Proceedings of the 12th IEEE International Conference on Cloud Computing (CLOUD2020). 2019. | | | | |

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| **Work experience** | | |
| Research associate | **Technische Universität Berlin** | October 2017 –  present |
| * Anomaly detection, machine learning, distributed systems reliability, learning from heterogeneous data * Worked on projects funded from Huawei (Anomaly Detection in Distributed Traces, and Multi-source Anomaly Detection in Distributed Systems), and Berlin Big Data Center (BBDC). | | |
| Junior teaching assistant | **Faculty of Electrical Engineering and Information Technology – Skopje** | February 2016 –  May 2017 |
| * This role involves both teaching assistance in and marking of weekly problems for the following courses: Programming and Algorithms, Object Oriented programming, and Robotics/Machine Learning. | | |
| **Technologies** | | |
| * Python, C++, Java, SQL. * PyTorch, Keras, Pandas, Apache Spark | | |
| **Competitions** | | |
| * **Kaggle Quora Question Pairs** (May 2017) – *Gold medal, top 0.3%*. Developed complex ensemble of machine learning models (multiple deep learning and tree boosting methods). * **Kaggle Data Science Bowl 2017– Lung Cancer Detection** (April 2017) – *Silver medal*, top 4%. Using a data set of thousands of high-resolution lung scans developed ensemble of deep learning models that accurately determine when lesions in the lungs are cancerous. * **Kaggle Bosch Production Line Performance (November 2016)** – *Silver medal*, top 3.6%. Solution using ensembles and gradient boosting. * **Kaggle Predicting Red Hat Business Value** (September 2016) – *Silver medal*, top 1.6%. Solution using ensembles and gradient boosting. | | |
| * **Robomac 2016 –** *1st place*. Robomac is annual international competition held at Faculty of Electrical Engineering and Information Technologies – Skopje and organized in a partnership with IEEE. | | |

Personal Links:

<https://www.linkedin.com/in/snedelkoski/>   
<https://kaggle.com/salkaa>  
<http://www.user.tu-berlin.de/sasho/>