

# Young-Jun Ko

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Address: Balberstrasse 68, 8038 Zurich, Switzerland  
Citizenship: German  
Work Permit: Swiss Permit C

## Current Occupation

Since Nov.2018 **AI DevTech Engineer at NVIDIA - Performance Software Engineering for Deep Learning Workloads**  
Developed custom CUDA kernels to optimize BERT for MLPerf v0.7 Inference  
TensorRT-based accelerated inference of BERT (NVIDIA Dev Blog)  
Contributed GLM CUDA code to RAPIDS cuml

## Education

Feb.2011 - Feb.2017 **PhD at EPFL, Switzerland**  
Supervisors: Prof. Matthias Grossglauser, Dr. Matthias W. Seeger  
Thesis: Applications of Approximate Learning and Inference for Probabilistic Models  
Oct.2007 - Jun.2010 **MSc in Comp. Sci. at Saarland University, Germany (GPA<sup>1</sup>: 1.3)**  
Supervisor: Prof. Matthias Hein  
Thesis: Stability of Feature Selection Methods  
Oct.2002 - Sep.2005 **Dipl.-Inf.(BA)/BSc(OU) in Applied Computer Science at the University of Cooperative Education, Germany (GPA: 1.4)**  
Thesis: Rule-based Invoicing of IBM Infrastructure Services for Deutsche Bank  
1993 - 2002 **Abitur at Lessing Gymnasium, Germany (GPA: 1.3)**

## Publications

2016 *YJ Ko, L. Maystre, M. Grossglauser, Collaborative Recurrent Neural Networks for Dynamic Recommender Systems, ACML 2016*  
2015 *YJ Ko, M. Seeger, Expectation Propagation for Rectified Linear Poisson Regression, ACML 2015*  
2014 *YJ Ko, M. E. Khan, Variational Gaussian Inference for Bilinear Models of Count Data, ACML 2014*  
*M. E. Khan, YJ Ko, M. Seeger, Scalable Collaborative Bayesian Preference Learning, AISTATS 2014*  
2013 *M. E. Khan, YJ Ko, M. Seeger, Scalable Bayesian Preference Learning, NIPS 2013 Workshop on Personalization 2013*  
2012 *YJ Ko, M. Seeger, Large Scale Variational Bayesian Inference for Structured Scale Mixture Models, ICML 2012*

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<sup>1</sup>All GPAs on a German scale: 1.0 (Best) - 6.0

## Scholarships, other Professional Activities

NVIDIA NTECH 2020	Presented work on optimized Multi-head Attention
CSCS Summer School 2020	Lecturer
CSCS Summer School 2019	Lecturer
ACML 2017	Senior PC member
Apr.2015	Google internship offer, Mountain View, California
Jul.2010 - Sep.2010	PhD Scholarship of the International Max Planck Research School for Computer Science (Cancelled due to the move to EPFL)
Apr.2008 - Sep.2009	Scholarship of the Saarbrücken Graduate School in Computer Science
Summer 2008	Tuition Fee Waiver (Grades in the top 5%, afterwards fees were abolished)

## Work Experience

Apr.2017 - Sep.2018	<b>Senior Machine Learning Engineer at 1plusX AG, Zurich, Switzerland</b> Representation learning and predictive modeling based on interaction events using neural networks in Scala/Spark and Python
Feb.2011 - Feb.2017	<b>Research- and Teaching Assistant at EPFL</b>
Jun.2010 - Feb.2011	<b>Research Assistant at Saarland University</b>
Oct.2006 - Oct.2007	<b>Software Developer at SAP AG - Analytical Banking</b> SAP Bank Analyzer 6 Process Infrastructure Development in ABAP Objects on the Netweaver Plattform
Oct.2005 - Sep.2006	<b>Software Developer at IBM Systems &amp; Technology Group</b> IBM Total Storage Productivity Center Development (Storage Area Network Management based on SNIA SMI-S Interface)
Jan.2005 - Mar.2005	<b>Internship at IBM ITS Consulting &amp; Architecture</b> Development of a network connection analysis tool in J2EE
Jun.2004 - Sep.2004	<b>Internship at IBM AMS Solution Implementation</b> Design and implementation of a framework for backend system integration
Jan.2004 - Mar.2004	<b>Internship at IBM BCS Sector Finance</b> Design and implementation of a web framework for frontoffice work places

## Languages and Technologies

Languages:	German (native), English (fluent), Korean (intermediate), French (basic), Italian (basic), Latinum
Programming:	Python, Julia, Matlab, Scala, C/C++, Java, SQL
Technologies:	MxNet/Gluon, Theano and Tensorflow, GPU computing (CUDA), Apache Spark, Numpy/Scipy, Pandas, Linux, git, web (flask, javascript), Apache Kafka

Zurich, January 14, 2021