# 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 Engineer-

ing for Deep Learning Workloads

Optimized CUDA kernels for MLPerf BERT Training v1.0 (Link) Optimized CUDA kernels for MLPerf BERT Inference v0.7 (Link)

TensorRT-based accelerated inference of BERT (NVIDIA Dev Blog Link)

Contributed GLM CUDA code to RAPIDS cuml (Link)

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 Uni-

versity 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 Re-

gression, 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

 $<sup>^1</sup>$ 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

Senior Machine Learning Engineer at 1plus XAG, Zurich, Switzerland
Representation learning and predictive modeling based on interaction events using neural networks in Scala/Spark and Python
Research- and Teaching Assistant at EPFL
Research Assistant at Saarland University
Software Developer at SAP AG - Analytical Banking
$\operatorname{SAP}$ Bank Analyzer 6 Process Infrastructure Development in ABAP Objects on the Netweaver Plattform
Software Developer at IBM Systems & Technology Group
IBM Total Storage Productivity Center Development (Storage Area Network Management based on SNIA SMI-S Interface)
Internship at IBM ITS Consulting & Architecture
Development of a network connection analysis tool in $J2EE$
Internship at IBM AMS Solution Implementation

Design and implementation of a framework for backend system integration

Jan.2004 - Mar.2004 Internship at IBM BCS Sector Finance

Design and implementation of a web framework for frontoffice work places

## Languages and Technologies

Languages: German (native), English (fluent), Korean (intermediate), French (basic), Ital-

ian (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, May 15, 2021