# Gordon Euhyun Moon

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# **EDUCATION**

The Ohio State University

Columbus, OH

2013-2019

Ph.D. in Computer Science & Engineering

Thesis: "Parallel Algorithms for Machine Learning" Advisor: Professor Ponnuswamy Sadayappan

**Indiana University** 

Bloomington, IN

2011–2013

M.S. in Computer Science

Seoul, Korea

**Yonsei University** B.S. in Computer Science & Industrial System Engineering

2004–2011

Double Baccalaureates:

Computer Science (2004–2005) & Industrial System Engineering (2006–2010) Military Duty Service at 6th Army Corps, Pochun, ROK Army, 2007–2009

#### RESEARCH INTERESTS

High-Performance Computing, Machine Learning, Deep Learning, Natural Language Processing, Graph Mining

#### **PUBLICATIONS**

**Gordon E. Moon**, I. Nisa, A. Sukumaran-Rajam, B. Bandyopadhyay, S. Parthasarathy and P. Sadayappan, "Parallel Latent Dirichlet Allocation on GPUs,"

Proceedings of the 2018 International Conference on Computational Science (ICCS), 2018

**Gordon E. Moon**, A. Sukumaran-Rajam, and P. Sadayappan, "Parallel LDA with Over-Decomposition,"

Proceedings of the 2017 IEEE 24th International Conference on High Performance Computing Workshops (HiPCW), 2017

**Gordon E. Moon**, and J. Hamm, "A Large-Scale Study in Predictability of Daily Activities and Places,"

Proceedings of the 8th EAI International Conference on Mobile Computing, Applications and Services (MobiCASE), 2016

#### PAPERS UNDER REVIEW

**Gordon E. Moon**, A. Sukumaran-Rajam, S. Parthasarathy and P. Sadayappan, "PL-NMF: Parallel Locality-optimized Non-negative Matrix Factorization,"

arXiv preprint arXiv:1904.07935, 2019

Status: Under second round of revision at a journal

**Gordon E. Moon**, D. Newman-Griffis, J. Kim, A. Sukumaran-Rajam, E. Fosler-Lussier and P. Sadayappan, "Parallel Data-Local Training for Optimizing Word2Vec Embeddings for Word and Graph Embeddings,"

Status: Under review at a conference

## **INVITED TALKS**

**Gordon E. Moon**, "Accelerated Computing for Machine Learning", Sandia National Laboratories, Albuquerque, NM, August, 2019

**Gordon E. Moon**, "Accelerated Computing for Machine Learning", Oak Ridge National Laboratory, Oak Ridge, TN, August, 2019

**Gordon E. Moon**, "Accelerated Computing for Machine Learning", AMD Research, Santa Clara, CA, July, 2019

## **TEACHING EXPERIENCE**

## The Ohio State University

Columbus, OH

Instructor

- Computer Programming In Java
- Introduction to Computing Technology

*Graduate Teaching Assistant* 

2018-present

2014-2018

- Survey of Artificial Intelligence II: Advanced Techniques
- Principles of Programming Languages

#### **Indiana University**

Bloomington, IN

Graduate Teaching Assistant

- Elements of Artificial Intelligence

2012

#### PROFESSIONAL SERVICE

Program Committee Member

• Tenth International Workshop on Accelerating Analytics and Data Management Systems Using Modern Processor and Storage Architectures (ADMS 2019), August 2019

#### AWARDS/HONORS

Fall 2011–Spring 2012: Graduate Fellowship, Indiana University

Spring 2007: Dean's Innovation Award, Ecology-Friendly Devices for Comestibles Waste Treatment and Recycling, Yonsei University

## **EXTRACURRICULAR ACTIVITIES**

December 2008–June 2009: Chief of Squadron, Transportation Battalion, Sixth Army Corps Headquarters, Pochun, near DMZ towards Border to North Korea, South Korea

# **VOLUNTEERING SERVICES**

June 2010: Dispatched to Siem Riep, Cambodia for Delivery of Medical Supplies under Auspices of Kyungdong Presbyterian Church

January 2010–February 2010: Dispatched to Ho Chi Minh, Vietnam for Medical Curative Treatment under Auspices of Kyungdong Presbyterian Church

# **CERTIFICATION/SKILLS**

Topmost-Grade Information Processing Technician Authorized by Ministry of IT, Government of Republic of Korea

Proficient in parallel programming using OpenMP, MPI, CUDA, etc.

Proficient in deep learning frameworks such as TensorFlow, PyTorch, Theano, Caffe, etc.

Programming Languages Proficiency: C/C++, Java, Python, MATLAB, R, and MySQL

Miscellaneous: U.S. citizenship

## **REFERENCES**

# Ponnuswamy Sadayappan

Professor School of Computing University of Utah 50 S. Central Campus Drive MEB 3458 Salt Lake City, UT 84112 saday@cs.utah.edu

# **Eric Fosler-Lussier**

Professor
Department of Computer Science &
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#### Aravind Sukumaran-Rajam

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