YUNSEONG LEE

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Work Experience

2020–present **Senior Engineer**, *Qualcomm AI Research*, Seoul, Korea.

2014–2020 **Research Assistant**, *Software Platform Lab, SNU*, Seoul, South Korea.
I have studied and built large-scale data processing systems, recently focusing on building Machine Learning (ML) and Deep Learning (DL) inference systems.

2014–present **Project Management Committee (PMC)**, *Apache REEF*, Apache Software Foundation.
I am one of the PMC members of Apache REEF. I worked as the release manager of REEF v0.14.

2017/6–2017/9 **Research Intern**, *Microsoft*, Redmond, US.
I investigated how to optimize ML inference systems with white box approaches. The research was published in ICCD, NIPS ML Systems workshop, SysML, OSDI, and IEEE Data Engineering bulletin.

2015/9–2016/2 **Research Intern**, *Microsoft Research Asia*, Beijing, China.
I participated in the Pado project, a data processing system for handling transient resources in data centers. This research was published in EuroSys.

Education

2014–2020 **PhD**, *Seoul National University*, Seoul, South Korea.
Computer Science and Engineering (advisor: Byung-Gon Chun)

2007–2014 **Bachelor**, *Seoul National University*, Seoul, South Korea.
Computer Science and Engineering

Publications

[1] W.-Y. Lee, **Y. Lee**, J. S. Jeong, G.-I. Yu, J. Y. Kim, H. J. Park, B. Jeon, W. Song, G. Kim, M. Weimer, B. Cho, and B.-G. Chun. *Automating System Configuration of Distributed Machine Learning*. ICDCS, 2019.

[2] **Y. Lee**, A. Scolari, B.-G. Chun, M. Weimer, and M. Interlandi. *From the Edge to the Cloud: Model Serving in ML.NET*. IEEE Data Engineering Bulletin, december edition, 2018.

[3] **Y. Lee**, A. Scolari, B.-G. Chun, M. D. Santambrogio, M. Weimer, and M. Interlandi. *Opening the Black Box of Machine Learning Prediction Serving Systems*. OSDI, 2018.

[4] **Y. Lee**, A. Scolari, M. Interlandi, M. Weimer, and B.-G. Chun. *Towards High-Performance Prediction Serving Systems*. SysML, 2018.

[5] **Y. Lee**, A. Scolari, M. Interlandi, M. Weimer, and B.-G. Chun. *Towards High-Performance Prediction Serving Systems*. NIPS ML Systems Workshop, 2017.

[6] A. Scolari, **Y. Lee**, M. Weimer, and M. Interlandi. *Towards Accelerating Generic Machine Learning Prediction Pipelines*. ICCD, 2017.

[7] Y. Yang, G.-W. Kim, W. W. Song, **Y. Lee**, A. Chung, Z. Qian, B. Cho, and B.-G. Chun. *Pado: A Data Processing Engine for Harnessing Transient Resources in Datacenters*. EuroSys, 2017.

[8] B.-G. Chun, T. Condie, Y. Chen, B. Cho, A. Chung, C. Curino, C. Douglas, M. Interlandi, B. Jeon, J. S. Jeong, G.-W. Lee, **Y. Lee**, T. Majestro, D. Malkhi, S. Matusevych, B. Myers, M. Mykhailova, S. Narayanamurthy, J. Noor, R. Ramakrishnan, S. Rao, R. Sears, B. Sezgin, T.-G. Um, J. Wang, M. Weimer, and Y. Yang. *Apache REEF: Retainable Evaluator Execution Framework*. ACM Transactions of Computer Systems, october edition, 2017.

[9] B.-G. Chun, B. Cho, B. Jeon, J. S. Jeong, G. Kim, J. Y. Kim, W.-Y. Lee, **Y. S. Lee**, M. Weimer, and G.-I. Yu. *Dolphin: Runtime Optimization for Distributed Machine Learning*. ICML ML Sys. Workshop, 2016.

[10] M. Weimer, Y. Chen, B.-G. Chun, T. Condie, C. Curino, C. Douglas, **Y. Lee**, T. Majestro, D. Malkhi, S. Matusevych, B. Myers, S. Narayanamurthy, R. Ramakrishnan, S. Rao, R. Sears, B. Sezgin, and J. Wang. *REEF: Retainable Evaluator Execution Framework*. SIGMOD, 2015.

[11] J. S. Jeong, W.-Y. Lee, **Y. Lee**, Y. Yang, B. Cho, and B.-G. Chun. *Elastic Memory: Bring Elasticity Back To In-Memory Big Data Analytics*. HotOS, 2015.