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Yunseong Lee

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Education

Seoul, Korea **Seoul National University(SNU)** **Mar 2007 - Current**

- Ph.D. Student in Computer Science & Engineering (Advisor: Byung-Gon Chun), Mar 2014 - Current.
- B.S. in Computer Science & Engineering, Mar 2007 - Feb 2014.

Research Experience

Research Assistant **SNU Software Platform Lab** **Mar 2014 - Current**

Pretzel

- A Machine Learning Inference System that performs model serving in a white-box manner.

Cruise

- A Distributed Machine Learning Training System that automates the system configurations (e.g., resource/data assignment) in Parameter Server.

Project Management Committee **Apache REEF** **Sep 2014 - Current**

- Worked as release manager of REEF 0.14 (REEF-811), the first release as an Apache Top-Level Project (TLP).

Work Experience

Data Group, Research Intern **Microsoft Research Redmond** **Jun 2017 - Sep 2017**

- Explored the optimization opportunities for the Machine Learning prediction pipelines.

Systems Research Group, Intern **Microsoft Research Asia** **Sep 2015 - Feb 2016**

- Co-designed and co-implemented Pado, a data processing engine that can handle the transient resources.

Publications

- **Yunseong Lee**, Alberto Scolari, Byung-Gon Chun, Marco Domenico Santambrogio, Markus Weimer, Matteo Interlandi. Opening the Black Box of Machine Learning Prediction Serving Systems. OSDI, October 2018.
- **Yunseong Lee**, Alberto Scolari, Byung-Gon Chun, Markus Weimer, Matteo Interlandi. From the Edge to the Cloud: Model Serving in ML.NET. IEEE Data Engineering Bulletin, December 2018.
- **Yunseong Lee**, Alberto Scolari, Matteo Interlandi, Markus Weimer, Byung-Gon Chun. Towards High-Performance Prediction Serving Systems. NIPS ML Systems Workshop, December 2017.
- Alberto Scolari, **Yunseong Lee**, Markus Weimer, Matteo Interlandi. Towards Accelerating Generic Machine Learning Prediction Pipelines. ICCD, November 2017.
- Youngseok Yang, Geon-Woo Kim, Won Wook Song, **Yunseong Lee**, Andrew Chung, Zhengping Qian, Brian Cho, Byung-Gon Chun. Pado: A Data Processing Engine for Harnessing Transient Resources in Datacenters. Eurosys 2017.
- Byung-Gon Chun, Brian Cho, Beomyeol Jeon, Joo Seong Jeong, Gunhee Kim, Joo Yeon Kim, Woo-Yeon Lee, **Yun Seong Lee**, Markus Weimer, Gyeong-In Yu. Dolphin: Runtime Optimization for Distributed Machine Learning. ICML ML Systems workshop, June 2016.
- Markus Weimer, Yingda Chen, Byung-Gon Chun, Tyson Condie, Carlo Curino, Chris Douglas, **Yunseong Lee**, Tony Majestro, Dahlia Malkhi, Sergiy Matusevych, Brandon Myers, Shravan Narayanamurthy, Raghu Ramakrishnan, Sriram Rao, Russell Sears, Beysim Sezgin, Julia Wang. ACM SIGMOD 2015, June 2015.
- Joo Seong Jeong, Woo-Yeon Lee, **Yunseong Lee**, Youngseok Yang, Brian Cho, Byung-Gon Chun. Elastic Memory: Bring Elasticity Back To In-Memory Big Data Analytics. HotOS 2015, May 2015.