

# HYUNSU CHO

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## Education

**M.S. in Computer Science and Engineering**, University of Washington, Seattle, WA

- September 2015 – March 2018
- Advisor: [Carlos Guestrin](#)

**B.S. in Computer Science and B.S. in Mathematics**, Trinity College, Hartford, CT

- September 2011 – May 2015

## Experience

- **Applied Scientist**, Amazon Web Services. January 2018–Present.  
I was part of initial efforts to launch [Amazon SageMaker Neo service](#) in November 2018.
- **Applied Scientist Intern**, Amazon Web Services. June–December 2017.
- **Lead Maintainer** of XGBoost project. 2016–Present.  
XGBoost is an efficient, scalable framework for gradient boosting. Available at <https://github.com/dmlc/xgboost>.
- **Owner and Maintainer** of Treelite project. 2017–Present.  
Treelite is a framework for easy and efficient deployment of decision tree ensembles. Available at <https://github.com/dmlc/treelite>. Treelite is used within [Amazon SageMaker Neo service](#).
- **Teaching Assistant**, Machine Learning Specialization at Coursera. 2015–2017.

## Awards and Honors

- **Best Short Paper Award**, ACM SIGIR 2019, Paris, France, July 25, 2019.
- **Winner of Outstanding Undergraduate Researcher Award**, Computing Research Association, 2015.
- **Recipient of the Goldwater Scholarship**, The United States Congress, 2014.

## Peer-Reviewed Publications

- Theodore Vasiloudis, Hyunsu Cho, and Henrik Boström. “Block-distributed Gradient Boosted Trees,” *ACM SIGIR 2019*, Paris, France, July 25, 2019. Best Short Paper Award.
- Hyunsu Cho and Mu Li. “Treelite: toolbox for decision tree deployment,” *SysML 2018*, Stanford, CA, February 16, 2018.
- Lin Cheng, Hyunsu Cho, and Peter Yoon. “An Accelerated Procedure for Hypergraph Coarsening on the GPU,” *IEEE High Performance Extreme Computing Conference*, Waltham, MA, September 16, 2015.
- Hyunsu Cho and Peter Yoon. “A Memory-Efficient Algorithm for Large-Scale Symmetric Tridiagonal Eigenvalue Problem on Multi-GPU Systems,” *Proceedings of the 2014 International Conference on Parallel and Distributed Processing Techniques and Applications*, pp. 568-573, Las Vegas, NV, July 24, 2014.
- Lin Cheng, Hyunsu Cho, and Peter Yoon. “GPU Accelerated Vessel Segmentation Using Laplacian Eigenmaps,” *Proceedings of the IASTED International Conference on Parallel and Distributed Computing and Networks*, pp. 177-184, Innsbruck, Austria, February 17, 2014.
- Lin Cheng, Hyunsu Cho, Peter Yoon, and Jiajia Zhao. “An Efficient Out-of-Core Implementation of Block Cholesky Decomposition on a Multi-GPU System,” *Proceedings of the 24th IASTED International Conference on Parallel and Distributed Computing and Systems*, Las Vegas, NV, November 13, 2012. Best Paper Award.