

# Huibin Shen

[Google Scholar](#) • [GitHub](#)

EDUCATION	<b>Aalto University</b> , Espoo, Finland; Supervisor: Prof. Juho Rousu ▪ Doctor of Philosophy ( <b>Pass with Distinction</b> ) in Computer Science <ul style="list-style-type: none"><li>• Thesis: Machine learning methods for small molecule identification</li><li>• Award: <a href="#">Best Finnish bioinformatics Ph.D. thesis done in 2016-2017</a></li></ul>	Jan 2013 – Jun 2017
	<b>University of Helsinki</b> , Helsinki, Finland ▪ Master of Science (M.S.) in Algorithms and Machine Learning	Sep 2010 – Aug 2012
	<b>East China Normal University</b> , Shanghai, China ▪ Bachelor of Science (B.S.) in Software Engineering	Sep 2006 – Jul 2010
WORK EXPERIENCE	<b>Machine Learning Scientist</b> , Amazon Web Service ▪ Launching team of AWS SageMaker Automatic Model Tuning (HPO) ▪ Launching team of AWS SageMaker AutoPilot (AutoML) ▪ Applied research in HPO and AutoML, leading to both production and external impacts ▪ 3 external publications, 3 major production features, 2 filed US patents and 4 (internal) technical reports <b>Applied Scientist Intern</b> , Amazon Core Machine Learning ▪ Project: Bayesian Optimization with conditional dependency	Jul 2017 – Present Jun 2016 – Sep 2016
PROFESSIONAL ACTIVITIES	▪ PC member of NAS workshop at ICLR 2020 ▪ Reviewer of NeurIPS (2020, 2019, 2018), ICLR (2021, 2020, 2019), ICML (2020), TKDD (2016) ▪ Organizer of HPO and AutoML reading group at Amazon Berlin ▪ Dagstuhl Seminar on Computational Metabolomics 2015, Dagstuhl, Germany	
SELECTED PUBLICATIONS	<ul style="list-style-type: none"><li>[1] D. Salinas, <a href="#">H. Shen</a>, and V. Perrone, “A quantile-based approach for hyperparameter transfer learning.” <i>Proceedings of the International Conference on Machine Learning (ICML 2020)</i>, Jul 2020.</li><li>[2] V. Perrone, <a href="#">H. Shen</a>, M.W. Seeger, C. Archambeau and R. Jenatton, “Learning search spaces for Bayesian optimization: Another view of hyperparameter transfer learning.” <i>Advances in Neural Information Processing Systems 32 (NeurIPS 2019)</i>, Dec 2019.</li><li>[3] C. Brouard, <a href="#">H. Shen</a>, K. Dührkop, F. d’Alché-Buc, S. Böcker and J. Rousu, “Fast metabolite identification with Input Output Kernel Regression.” <i>Proceedings of Intelligent Systems for Molecular Biology 2016</i>, Orlando, USA, Jul 2016.</li><li>[4] <a href="#">H. Shen</a>, S. Szedmak, C. Brouard and J. Rousu, “Soft Kernel Target Alignment for Two-stage Multiple Kernel Learning.” <i>Proceedings of 19th International Conference on Discovery Science</i>, Bari, Italy, Oct 2016.</li><li>[5] K. Dührkop, <a href="#">H. Shen</a>, M. Meusel, J. Rousu and S. Böcker, “Searching molecular structure databases with tandem mass spectra using CSI:FingerID” <i>Proceedings of National Academy of Science</i>, vol. 112, no. 41, pp. 12580–12585, May 2015.</li><li>[6] <a href="#">H. Shen</a>, K. Dührkop, S. Böcker and J. Rousu, “Metabolite identification through multiple kernel learning on fragmentation trees.” <i>Proceedings of Intelligent Systems for Molecular Biology 2014</i>, Boston, USA, Jul 2014.</li><li>[7] <a href="#">H. Shen</a>, N. Zamboni, M. Heinonen and J. Rousu, “Metabolite Identification through Machine Learning–Tackling CASMI Challenge Using FingerID.” <i>Metabolites</i>, vol. 3, no. 2, pp. 484–505, Jun 2013.</li><li>[8] M. Heinonen, <a href="#">H. Shen</a>, N. Zamboni and J. Rousu, “Metabolite identification and molecular fingerprint prediction through machine learning.” <i>Proceedings of Machine Learning in System Biology 2012</i>, Basel, Switzerland, Aug 2012.</li></ul>	
LANGUAGES	Chinese: Native language • English: Professional • German: Basic.	

