

Huibin Shen

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EDUCATION	Aalto University , Espoo, Finland; Supervisor: Prof. Juho Rousu ▪ Doctor of Philosophy (Pass with Distinction) in Computer Science <ul style="list-style-type: none">• Thesis: Machine learning methods for small molecule identification• Award: Best Finnish bioinformatics Ph.D. thesis done in 2016-2017	Jan 2013 – Jun 2017
	University of Helsinki , Helsinki, Finland ▪ Master of Science (M.S.) in Algorithms and Machine Learning	Sep 2010 – Aug 2012
	East China Normal University , Shanghai, China ▪ Bachelor of Science (B.S.) in Software Engineering	Sep 2006 – Jul 2010
WORK EXPERIENCE	Machine Learning Scientist , 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	Jul 2017 – Present
	Applied Scientist Intern , Amazon Core Machine Learning • Project: Bayesian Optimization with conditional dependency	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	[1] D. Salinas, H. Shen , 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. [2] V. Perrone, H. Shen , 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. [3] C. Brouard, H. Shen , 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. [4] H. Shen , 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. [5] K. Dührkop, H. Shen , 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. [6] H. Shen , 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. [7] H. Shen , 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. [8] M. Heinonen, H. Shen , 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.	
LANGUAGES	Chinese: Native language • English: Professional • German: Basic.	