

Duc-Hoan Nguyen

CONTACT INFORMATION

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RESEARCH INTERESTS

Domain Adaptation, Machine Learning, Learning Theory, Inverse Problems

EMPLOYMENT

- Postdoctoral at RICAM, Austrian Academy of Sciences, Austria 2024 - present
- PhD candidate at RICAM, Austrian Academy of Sciences, Austria 2020 - 2023
- Reseacher in Artificial Intelligence Laboratory, Thang Long University 2019 - 2020
- Lecturer in Department of Mathematics and Informatics, Thang Long University 2018 - 2020

EDUCATION

- Ph.D at Johannes Kepler University, Linz, Austria Sep 2020 - Nov 2023
 - Supervisors: Prof. Sergei Pereverzyev, Prof. Bernhard A. Moser, and Dr. Werner Zellinger
 - Thesis: Regularization in Reproducing Kernel Hilbert Spaces for Covariate Shift Domain Adaptation
- Master 2 University of Limoges, Limoges, France 2016 - 2017
Master ACSYON: Algorithmics, Symbolic Computation and Numerical Optimization.
- Master 1 in Hanoi Institute of Mathematics, Vietnam 2015 - 2016
International Master Program in Mathematics
- Bachelor of Mathematics in Hanoi University of Science, Vietnam 2010 - 2014
 - Senior Advisor: Professor Ho Dang Phuc
 - Senior Thesis: Statistical Methods in Quality Control.

PUBLICATIONS

- M.-C. Dinu, M. Holzleitner, M. Beck, **D. H. Nguyen**, A. Huber, H. Eghbal-zadeh, B. Moser, S. V. Pereverzyev, S. Hochreiter, and W. Zellinger. *Addressing parameter choice issues in unsupervised domain adaptation by aggregation*. In: International Conference on Learning Representations (ICLR), selected as **notable-top-5% paper**, 2023.
- E. R. Gizewski, L. Mayer, B. A. Moser, **D. H. Nguyen**, S. Pereverzyev Jr, S. V. Pereverzyev, N. Shepeleva, and W. Zellinger. *On a regularization of unsupervised domain adaptation in RKHS*. *Applied and Computational Harmonic Analysis*, 57:201–227, 2022.
- W. Zellinger, N. Shepeleva, M. Dinu, H. Eghbal zadeh, **D. H. Nguyen**, B. Nessler, S. Pereverzyev, and B. A. Moser. *The balancing principle for parameter choice in distance-regularized domain adaptation*. *Advances in Neural Information Processing Systems*, 2021.

PREPRINTS

- **D. H. Nguyen**, W. Zellinger, and S. Pereverzyev. *On regularized Radon-Nikodym differentiation*. Submitted, 2023. Available at <https://arxiv.org/abs/2308.07887>
- **D. H. Nguyen**, S. Pereverzyev, and W. Zellinger. *General regularization in covariate shift adaptation*. Submitted, 2023. Available at <https://arxiv.org/abs/2307.11503>

RESEARCH EXPERIENCES

- Reviewer for NeurIPS 2023, ICML 2024 conferences
- Work on the Skin fungal diseases detection 2019 - 2020
 - Project leader: Prof. Nguyen Tien Dung
 - Associated between the Torus Company, Toulouse, France and Artificial Intelligence Laboratory, Thang Long University.
- Work on the Hanoi Formal Abstract project 2018 - 2020
 - Project leader: Prof. Thomas Hales.
 - Associated between the University of Pittsburgh, Carnegie Mellon University, and Thang Long University.
- Internship in Hanoi Institute of Mathematics, Vietnam Oct, 2017 - Dec, 2018
 - Advisor: Prof. Dinh Nho Hao.
 - Subject: Inverse source problem.
- Internship in INSA, Rouen, France Mar - Aug, 2017
 - Advisor: Prof. Jean-Guy Caputo and Prof. Arnaud Knippel.
 - Subject: Inverse source problem in a forced wave graph.

TEACHING EXPERIENCES

- Exercise session: Mathematics for AI, Summer and Winter semesters in 2022, 2023.
- Exercise session: Discrete Mathematics , Spring and Fall semesters in 2019.

AWARDS AND FELLOWSHIPS

- Master scholarship, LabEX Sigma Lim, University of Limoges, France. 2016 - 2017
- Annual Scholarship for excellent students, Vietnam National University. 2012 - 2014

COMPUTER SKILLS

- Software: MATLAB, PyTorch, TensorFlow.
- Programming: C/C++, Python, LEAN.

REFERENCES

- ★ Prof. Dr. Sergei Pereverzyev
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Austrian Academy of Sciences
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- ★ Priv.-Doz. Dr. Bernhard Moser
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