LUU HUU PHUC

Curriculum Vitae

phucdoitoan@gmail.com・phuc@ml.ist.i.kyoto-u.ac.jp

phucdoitoan

June 2021

Kyoto, Japan

Education

2020 - Now	**Kyoto University.** M.Sc. in Intelligence Science and Technology. GPA: 4.19/4.3. (Transcript) A+ on advanced courses such as: Computer Vision (project, project), Pattern Recognition (project), Speech Processing, and Language Information Processing ...
2016 - 2020	**Kyoto University.** B.Eng. in Informatics and Mathematical Science. GPA: 3.57/4.3. (Transcript)
2015 - 2016	**Tokyo University of Foreign Studies.**
2012 - 2015	**Hanoi University of Science, Vietnam.** B.Sc. in Mathematics (Talented Program).

Experience

Dec 2020 - Feb 2021	**Artificial Intelligence Lab,** Fujitsu Laboratories Ltd. Research Internship. Worked on Molecular Property Prediction with Graph Neural Networks. Reviewed papers and implemented various core GNN models: GCN, GAT, GIN, MPNN, and PNA … Improved the company's model (NNDT) to attend in Molecular Property Prediction competitions. *Achievement*: Third place in MIT's AICures Open Task (as of May 2021). (Link)
April 2020 - Now	**Collective Intelligence Laboratory,** Kyoto University. Research Assistant. Worked on the application of Optimal Transport in graph learning. *Achievement*: Published two papers on the application of Optimal Transport in Link Prediction problems.

Papers

- **Simultaneous Link Prediction on Unaligned Networks Using Graph Embedding and Optimal Transport.** In IEEE DSAA 2020. (Paper, Pytorch code)
  Using optimal transport to softly align corresponding nodes between two related graphs and enhance the link prediction performance within each graph. An example of the graphs can be the Facebook and Twitter networks of the same set of users.
- **Inter-domain Multi-relational Link Prediction.** (Paper) (Accepted to ECML-PKDD 2021)
  Extending the above work to multi-relational graph data and aiming to predict hidden links between nodes across different graphs (inter-domain). Several divergences are investigated as regularizers, in which optimal transport shows the best results.

Awards

2015 - 2022	**The Japanese Government (MEXT) Scholarship Program.** Top 4 Vietnamese students to receive the five-year and two-year grants of undergraduate and master studies (for excellent academic performance).
2013 - 2015	**General Electric Foundation Scholar-Leaders Program in Vietnam.** Top 7 nationwide students to receive the three-year grant of undergraduate studies.
2012	**Second Prize** in **Vietnam National Mathematical Olympiad (VMO).**

Skills

Machine Learning	Graph Mining, Optimal Transport, Convex Optimization, Graph Neural Networks
Tools	Python, Pytorch, Numpy, Pandas

Languages

Vietnamese (Native)・English (Fluent, TOEIC 970/990)・Japanese (Proficient, around N2 level)