LUU HUU PHUC

Curriculum Vitae

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Education

2020 - Now	**Kyoto University.** M.Sc. in Intelligence Science and Technology. GPA: 4.20/4.3. (Transcript)
	A+ on advanced courses: Computer Vision (project, project) and Pattern Recognition (project) …
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	***Research Internship.* Artificial Intelligence Lab,** Fujitsu Research, Fujitsu Ltd.
	Worked on Molecular Property Prediction with Graph Neural Networks.
	Reviewed papers and implemented core GNN models. Improved the company's model to attend in Molecular Property Prediction competitions.
	Achievement: Fourth place in MIT's AICures Open Task. (Link)
April 2020 - Now	***Research Assistant.* Machine Learning and Data Mining Research Laboratory,** Kyoto University.
	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.** Luu Huu Phuc, Koh Takeuchi, Makoto Yamada, Hisashi Kashima. *2020 IEEE 7th International Conference on Data Science and Advanced Analytics (DSAA)*, 2020, pp. 245-254. (Paper, Pdf, 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.** Luu Huu Phuc, Koh Takeuchi, Seiji Okajima, Arseny Tolmachev, Tomoyoshi Takebayashi, Koji Maruhashi, Hisashi Kashima. *Joint European Conference on Machine Learning and Knowledge Discovery in Databases (ECML-PKDD)*, 2021, pp. 285-301. (Paper, Pdf, Code)
  Extending the above work to multi-relational graphs and aiming to predict hidden links between nodes across different but related graphs (inter-domain). Several divergences are investigated as regularization, 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, Graph Neural Networks, Optimal Transport
Tools	Python, Pytorch, Pytorch Geometric, Numpy, Pandas
Languages	Vietnamese (*Native*) ・ English (*Fluent, TOEIC 965/990*) ・ Japanese (*Proficient, around N2 level*)