An La

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EDUCATION

2021 - present	MS/PhD (Computer Science) at **University of Massachusetts Amherst**	(GPA: 3.82/4.0)
	Advisor: Dr. Hung Le	
2013 - 2017	Bachelor's Degree at **Honors Program, VNU-HCMUS, Vietnam**	(GPA: 3.57/4.0)
	Information Technology, Graduated with distinction.	

PUBLICATIONS

La, A., & Le, H. *Dynamic Locality Sensitive Orderings in Doubling Metrics*. Accepted by STOC 2025.

La, A., & Le, H. (2024, August). *New weighted additive spanners*.

La, A., Vo, P., & Vu, T. (2019, July). *Adaptive Collaborative Filtering for Recommender System*. In International Conference on Conceptual Structures (pp. 117-130).

La, A. N. T.*, Nguyen, D. P.*, Pham, N. M., & Vu, Q. H. (2018). *Multi-modal video retrieval using Dilated Pyramidal Residual network*. Science and Technology Development Journal-Natural Sciences, 2(5), 138-143. [1]

SKILLS

Theory	Data structures & algorithms, quantitative analysis (Bayesian statistics, causal inference), probabilistic graphical models.
Programming	Proficient in Python to: develop recommendation systems; build machine learning models (Tensor Flow, PyTorch, Scikit-Learn); process, analyze and visualize data (Numpy, Pandas, Seaborn). Proficient in C++ to implement algorithms in competitive programming contests and Image Processing project (with OpenCV).

EXPERIENCE

2021 - now: Research and Teaching Assistant at Theory CS Group/UMass Amherst

- ⋆ Study and design data structures & algorithms in computational geometry, apply to approximation problems and data mining.
- ⋆ Designed a dynamic data structure for locality sensitive ordering in doubling metrics, obtained several algorithmic applications, notably the first dynamic k-fault tolerant spanner in doubling metrics with optimal sparsity and time per update.
- ⋆ Teaching Assistant: Algorithms for Data Science, Advanced Algorithms.

2020 - 2021: Data Scientist at PrimeData, Vietnam   github/anla11/analytic_marketing

- ⋆ Designed and implemented an automatic framework for segment analytics.
- ⋆ Generated insightful segments of users without manual analysis for algorithmic marketing applications, such as business identity, customer engagement campaign.
- ⋆ Technical skills: *quantitative analysis*, *Bayesian machine learning* and *probabilistic programming*.

2017 - 2019: Data Scientist at FPT Telecom, FPT Group, Vietnam   github/anla11/adaptive_cf_recsys

- ⋆ Designed and implemented a graph-based model dealing with multiple evaluation metrics for the recommender system of fptplay.vn.
- ⋆ Increased precision by 6% while maintaining diversity, coverage, and congestion.
- ⋆ Technical skills: *content-based analysis and modelling, user-centric analysis and collaborative-filtering modelling, graph-based algorithms, performance evaluation analysis*.

SELECTIVE AWARDS

Dec. 2016	National Vietnam award for Outstanding Female Students in Science and Technology
Aug. 2016	Awards from Facebook Hackathon Vietnam 2016
	1st prize of Most Innovative Product
	2nd prize of Best Product in Facebook Marketing Category
2014	*2nd prize* in ACM-ICPC Vietnam National 1st Round
2013	*3rd prize* in Informatics at the Vietnam National Excellent Student Exam

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[1]*These authors contributed equally to the work.