

# An La

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## EDUCATION

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- 2021 - present    Ms/PhD (Computer Science) at **University of Massachusetts Amherst**    (GPA: 3.76/4.0)  
Advisor: [Dr. Hung Le](#)  
Selective taken courses: Algorithms with Predictions, [Randomized Algorithms](#), [Probabilistic Graphical Model](#), [Distributed and Operating Systems](#).
- 2013 - 2017      Bachelor's Degree at **Honors Program, VNU-HCMUS, Vietnam**    (GPA: 3.57/4.0)  
Information Technology, Graduated with distinction.  
Selective taken courses: Parallel Programming with GPU, Data Storing and Recovering.

## PUBLICATIONS

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- La, A., & Le, H.** (2024, August). *Dynamic Locality Sensitive Orderings in Doubling Metrics*.  
<https://arxiv.org/abs/2408.14617>.
- La, A., & Le, H.** (2024, August). *New weighted additive spanners*. <https://arxiv.org/abs/2408.14638>.
- La, A., Vo, P., & Vu, T.** (2019, July). *Adaptive Collaborative Filtering for Recommender System*. In International Conference on Conceptual Structures (pp. 117-130). Springer, Cham.  
[https://doi.org/10.1007/978-3-030-23182-8\\_9](https://doi.org/10.1007/978-3-030-23182-8_9)

## WORKING EXPERIENCE

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- 2021 - now: **Research/Teaching Assistant at Theory CS Group/UMass Amherst**  
**Main research:** Data structures for Computational Geometry (Spanners, Locality Sensitive Orderings).  
**Side projects:** Learned Index Structures, Online TSP with Machine Learning advice.  
**Teaching Assistant:** [Algorithms for Data Science](#), [Advanced Algorithms](#)
- 2020 - 2021: **Data Scientist at PrimeData.AI, Vietnam**    [github/anla11/analytic\\_marketing](https://github.com/anla11/analytic_marketing)  
Design an automatic framework for Segment Analytics, which enables many marketing applications, including Business Identity and customer-centric features (Behavioural Similarity Search, Customer Journey Tracking, and Customer Engagement Campaign). The main technical approach included Bayesian Machine Learning and Probabilistic Programming.
- 2017 - 2019: **Data Scientist at FPT Telecom, FPT Group, Vietnam**    [github/anla11/adaptive\\_cf\\_recsys](https://github.com/anla11/adaptive_cf_recsys)  
Design and deploy a Graph-based model dealing with multiple evaluation metrics for the recommender system of [fptplay.vn](https://fptplay.vn). The model increased 6% on precision and remained close to the best of previous methods on diversity, coverage and congestion. The balance between these metrics is tunable by parameters.

## SKILLS

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- Theoretical skills    Data Structure Design, Algorithmic Analysis, Statistics and Probability.
- Programming skills    Machine Learning (Tensor Flow, PyTorch, Scikit-Learn), Data Analysis and Visualization (Numpy, Pandas, Seaborn), Image Processing (OpenCV). Proficient in C/C++, Python.

## SELECTIVE AWARDS

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