

Anamay Chaturvedi

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EDUCATION

Northeastern University Fall 2019 - present

- Ph.D. in Computer Science, Khoury College of Computer Science (ongoing)
- Advisor: [Professor Huy L. Nguyen](#)
- Current GPA : 3.9/4

National University of Singapore Fall 2016 - Fall 2018

- Master of Science in Mathematics
- GPA in Computer Science Coursework (8 courses): 4.94/5
- Overall GPA: 4.31/5

Indian Institute of Science Fall 2012 - Spring 2016

- Bachelor of Science in Mathematics
- GPA in Math and Computer Science Courses: 7/8
- Overall GPA: 6.6/8

WORK

Research Assistant February 2019 - August 2019

- Department of Computer Science, School of Computing, National University of Singapore
- Principle Investigator: [Professor Jonathan Scarlett](#)

PUBLICATIONS/PREPRINTS

2022

- Sidhant Bansal, Arnab Bhattacharyya, Anamay Chaturvedi, and Jonathan Scarlett. Universal 1-bit compressive sensing for bounded dynamic range signals. In *IEEE International Symposium on Information Theory, ISIT 2022, Espoo, Finland, June 26 - July 1, 2022*, pages 3280–3284. IEEE, 2022
- Anamay Chaturvedi, Huy L. Nguyen, and Thy Nguyen. Streaming sub-modular maximization with differential privacy. *CoRR*, 2022.
<https://arxiv.org/abs/2210.14315>

- Thy Nguyen, Anamay Chaturvedi, and Huy L. Nguyen. Improved learning-augmented algorithms for k-means and k-medians clustering. *CoRR*, 2022.
<https://arxiv.org/abs/2210.17028>

2021

- Anamay Chaturvedi, Matthew Jones, and Huy Le Nguyen. Locally private k-means clustering with constant multiplicative approximation and near-optimal additive error. In *Thirty-Sixth AAAI Conference on Artificial Intelligence, AAAI 2022, Thirty-Fourth Conference on Innovative Applications of Artificial Intelligence, IAAI 2022, The Twelveth Symposium on Educational Advances in Artificial Intelligence, EAAI 2022 Virtual Event, February 22 - March 1, 2022*, pages 6167–6174. AAAI Press, 2022
- Daniel Alabi, Omri Ben-Eliezer, and Anamay Chaturvedi. Bounded space differentially private quantiles.
https://math.mit.edu/~omrib/papers/DP_quantile_bdd_space.pdf
(TPDP 2021, extended abstract)

2020

- Anamay Chaturvedi and Jonathan Scarlett. Learning gaussian graphical models via multiplicative weights. In Silvia Chiappa and Roberto Calandra, editors, *The 23rd International Conference on Artificial Intelligence and Statistics, AISTATS 2020, 26-28 August 2020, Online [Palermo, Sicily, Italy]*, volume 108 of *Proceedings of Machine Learning Research*, pages 1104–1114. PMLR, 2020.
<http://proceedings.mlr.press/v108/chaturvedi20a.html>
- Anamay Chaturvedi, Huy Le Nguyen, and Lydia Zakyntinou. Differentially private decomposable submodular maximization. In *Thirty-Fifth AAAI Conference on Artificial Intelligence, AAAI 2021, Virtual Event, February 2-9, 2021*, pages 6984–6992. AAAI Press, 2021.
<https://ojs.aaai.org/index.php/AAAI/article/view/16860>
- Huy L. Nguyen, Anamay Chaturvedi, and Eric Z. Xu. Differentially private k-means via exponential mechanism and max cover. In *Thirty-Fifth AAAI Conference on Artificial Intelligence, AAAI 2021, Virtual Event, February 2-9, 2021*, pages 9101–9108. AAAI Press, 2021.
<https://ojs.aaai.org/index.php/AAAI/article/view/17099>

SKILLS

C++, Python, L^AT_EX

Mathematical analysis and problem-solving

Designing and implementing experimental benchmarks for algorithms

TEACHING

TA, CS7800 Advanced Algorithms Fall 2019, 2020, 2021

SERVICE

Co-organizer, [Theory Seminar](#) Fall 2021 - Fall 2022

AWARDS/RECOGNITION

Graduate Fellowship Fall 2019 - Summer 2020

- Covered stipend and tuition for the first year of doctoral studies

KVPY Fellowship Fall 2011 - Summer 2016

- Monthly stipend and access to resources and opportunities for research at various universities in India

REFERENCES

Huy Lê Nguyễn

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Khoury College of Computer Sciences
Northeastern University
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