Aneesh Raman **PhD Researcher@Boston University**

CONTACT INFORMATION

Computer Science Department
Boston University
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RESEARCH INTERESTS

Database Systems, Data Management, and Indexing.

PROFESSIONAL EXPERIENCE

- Teaching/Research Fellow at **Boston University** Jan 2021 - Present
- Student Researcher at **System Research@Google** Sep 2023 - Dec 2023
- Research Intern at **System Research@Google** May 2023 - Sep 2023
- Teaching Assistant at **Boston University** Jan 2020 - Dec 2020
- Teaching Asst. at **Purdue University Fort Wayne** Jan 2017 - May 2019
- Software Engr. Intern at **Ogha Research LLP**, India May 2018 - Aug 2018

EDUCATION

Ph.D. in Computer Science, 2021 - Present
Boston University, Massachusetts, USA.

M.Sc. in Computer Science and Engineering, 2019 - 2021
Boston University, Massachusetts, USA.

B.S in Computer Science, 2015 - 2019
Purdue University Fort Wayne, IN, USA.
Graduated with Highest Distinction, Dean's List and Semester Honors List

SCHOLARSHIPS AND AWARDS (SELECTED)

- **NSF Travel Grant** for **VLDB Travel Support 2022** 2022
- **Outstanding Teaching Fellow** at Boston University Graduate School of Arts and Sciences Spring 2022
- **Departmental Partial Tution Scholarship** at Boston University Department of Computer Science 2019
- **Sushil K Usman Endowed Scholarship** at Purdue University Fort Wayne 2016 - 2019
- **Chancellor's Merit Scholarship** at Purdue University Fort Wayne 2015-2019

PUBLICATIONS

1. **Aneesh Raman**, Konstantinos Karatsenidis, Shaolin Xie, Matthaios Olma, Subhadeep Sarkar, , Manos Athanassoulis. *QuIT your B^+-tree for the Quick Insertion Tree*, (**Under Review**), 2024; https://cs-people.bu.edu/aneeshr/quit-paper.pdf.
2. **Aneesh Raman**, Andy Huynh, Jinqi Lu, Manos Athanassoulis. *Benchmarking Learned and LSM Indexes for Data Sortedness*, Proceedings of the Workshop on Testing Database Systems (**DBTest**), 2024; https://cs-people.bu.edu/aneeshr/benchmark-learned-and-lsm-paper.pdf.
3. **Aneesh Raman**, Subhadeep Sarkar, Matthaios Olma, Manos Athanassoulis. *Indexing for Near-Sorted Data*, Proceedings of the International Conference on Data Engineering (**ICDE**), 2023; https://ieeexplore.ieee.org/document/10184781.
4. **Aneesh Raman**, Konstantinos Karatsenidis, Subhadeep Sarkar, Matthaios Olma, Manos Athanassoulis. *BoDS: A Benchmark on Data Sortedness*, Proceedings of the TPC Technology Conference on Performance Evaluation & Benchmarking (**TPCTC**), 2022; https://cs-people.bu.edu/mathan/publications/tpctc22-raman.pdf.

5. Ju Hyoung Mun, Zichen Zhu, **Aneesh Raman**, Manos Athanassoulis. *LSM-Tree Under (Memory) Pressure*, Proceedings of the International Workshop on Accelerating Data Management Systems Using Modern Processor and Storage Architectures (**ADMS**), 2022; http://cs-people.bu.edu/mathan/publications/adms22-mun.pdf.
6. Zichen Zhu, Ju Hyoung Mun, **Aneesh Raman**, Manos Athanassoulis. *Reducing Bloom Filter CPU Overhead in LSM-Trees on Modern Storage Devices*, Proceedings of the International Workshop on Data Management on New Hardware (**DaMoN**), 2021; https://dl.acm.org/doi/10.1145/3465998.3466002.

Posters and Presentations

1. **Aneesh Raman**, Subhadeep Sarkar, Matthaios Olma, Manos Athanassoulis. *Indexing for Near-Sorted Data*, Poster at IEEE ICDE 2023.
2. **Aneesh Raman**, Konstantinos Karatsenidis, Subhadeep Sarkar, Shaolin Xie, Jingyi Huang, Matthaios Olma, Manos Athanassoulis. *Sortedness-Aware Indexing*, Poster at North East Database Day 2023.
3. Zichen Zhu, Ju Hyoung Mun, **Aneesh Raman**, Manos Athanassoulis. *Reducing Bloom Filter CPU Overhead in LSM-Trees on Modern Storage Devices*, Poster at North East Database Day 2020.

Research Talks

1. "Indexing for Near-Sorted Data", Apr 2023, *ICDE*, Anaheim, CA.
2. "BoDS: A Benchmark on Data Sortedness", Sep 2022, *TPCTC 2022*, Sydney, Australia.
3. "Indexing for Near-Sorted Data", Apr 2022, *CGSW*, Boston University.

Teaching Experience (Selected)

Boston University (Teaching Fellow/TA) 2020 - Present

- CS 210 (Computer Systems) Spring 2024
- CS 660 (Graduate Introduction to Databases) Fall 2023
- CS 660 (Graduate Introduction to Databases) Fall 2022
- CS 561 (Data Systems Architectures) Spring 2022
- CS 460 (Introduction to Database Systems) Fall 2021
- CS 561 (Data Systems Architectures) Spring 2021
- CS131 (Combinatoric Structures) Spring, Summer & Fall 2020

Purdue University Fort Wayne (Teaching Assistant) 2017 - 2019

- CS260 (Data Strucrures)
- CS232 (Introduction to C & Unix)
- CS384 (Numerical Analysis)

Professional Services

- **Availability Reviewer**, SIGMOD 2022

Technical Skills

- **Programming Languages:** C, C++, C#, Java, Python, PHP, Node.js
- **Markup Languages:** HTML, LaTeX
- **Database Management Systems:** RocksDB, PostgreSQL, MySQL, MongoDB
- **Machine Learning:** TensorFlow, PyTorch, Keras