



Venkata Vamsikrishna Meduri

✉ vamsikrishna1902@gmail.com  vamsi-meduri

 <https://vamsikrishna1902.github.io>






Employment History

- 04/2024 –  **Staff Research Scientist.** IBM Research - Almaden.
- 05/2022 – 04/2024  **Research Scientist.** IBM Research - Almaden.
- 2017, 2018, 2020, 2021  **Summer Research Intern.** IBM Research - Almaden.
- 04/2013 – 12/2014  **Member of the Research Group.** SRM Research Institute - Bangalore.
- 01/2012 – 01/2013  **PhD Student.** CWI - Amsterdam.
- 12/2010 – 12/2011  **Research Assistant.** National University of Singapore.
- 07/2007 – 12/2007  **Associate Application Engineer.** Oracle India - Bangalore.


Education

- 01/2015 – 05/2022  **Ph.D., Arizona State University** in Computer Science.
Advisor: *Mohamed Sarwat*
Dissertation: *Human-in-the-Loop Machine Learning Systems for Data Integration and Predictive Analytics.*
- 01/2008 – 12/2010  **M.S., National University of Singapore** in Computer Science.
Advisor: *Kian-Lee Tan*
Thesis title: *Exhaustive Reuse of Subquery Plans to stretch Iterative Dynamic Programming for Complex Query Optimization.*
- 07/2003 – 04/2007  **B.Tech., Vellore Institute of Technology** in Computer Science.
Advisor: *Ranichandra Dharmaraj*
Undergrad Thesis title: *Query Optimization in Multidatabase Systems.*

Selected Publications

- 1 **V. V. Meduri**, A. Quamar, C. Lei, X. Qin, and B. Reinwald, “Alfa: Active learning for graph neural network-based semantic schema alignment,” *VLDB J.*, vol. 33, no. 4, pp. 981–1011, 2024.  DOI: 10.1007/S00778-023-00822-Z.
- 2 **V. V. Meduri**, K. Chowdhury, and M. Sarwat, “Evaluation of machine learning algorithms in predicting the next SQL query from the future,” *ACM Trans. Database Syst.*, vol. 46, no. 1, 4:1–4:46, 2021.  DOI: 10.1145/3442338.
- 3 **V. V. Meduri**, A. Quamar, C. Lei, V. Efthymiou, and F. Ozcan, “BI-REC: guided data analysis for conversational business intelligence,” *CoRR*, vol. abs/2105.00467, 2021. arXiv: 2105.00467.  URL: <https://arxiv.org/abs/2105.00467>.
- 4 **V. V. Meduri**, L. Popa, P. Sen, and M. Sarwat, “A comprehensive benchmark framework for active learning methods in entity matching,” in *ACM SIGMOD*, 2020, pp. 1133–1147.  DOI: 10.1145/3318464.3380597.
- 5 **V. V. Meduri**, K. Chowdhury, and M. Sarwat, “Recurrent neural networks for dynamic user intent prediction in human-database interaction,” in *EDBT*, 2019, pp. 654–657.  DOI: 10.5441/002/EDBT.2019.79.
- 6 **V. V. Meduri**, Z. Su, and K. Tan, “A write efficient pcm-aware sort,” in *DEXA*, 2012, pp. 86–100.
- 7 **V. V. Meduri** and K. Tan, “Subquery plan reuse based query optimization,” in *COMAD*, 2011, pp. 35–46.

Skills

Coding  Python, Java, C++, SQL, Bash scripting

Awards and Achievements

- | | |
|------------------|--|
| 2025 |  IBM Outstanding Technical Achievement Award , for the delivery of query optimizer in Watsonx.data 2.0 and order of magnitude performance improvement for TPC-DS 100 TBytes on Fusion HCI. |
| 2023 |  Best Reviewer Award , VLDB PhD Workshop. |
| |  IBM First Time Patent Application Invention Achievement Award , for a patent on active learning-based ontology alignment. |
| 2018-19, 2021-22 |  Engineering Grad Fellowship , from the Ira A. Fulton School of Engineering and the Polytechnic School at Arizona State University for best academic performance. |
| 2017 |  ACM SIGMOD 2017 Student Travel Award |
| 2008-10 |  Research Scholarship , from the National University of Singapore. |
| 2007 |  Merit Scholarship , from Vellore Institute of Technology for best academic performance. |

References

Mohamed Sarwat

 mo@wherobots.com

Fatma Özcan

 fatma.ozc@gmail.com


Paolo Papotti

 Paolo.Papotti@eurecom.fr

Berthold Reinwald

 reinwald@us.ibm.com

Lucian Popa

 lpopa@us.ibm.com