

MD Iftakharul Islam

Department of Computer Science
Kent State University
Kent, OH.

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EDUCATION

- Ph.D. Computer Science, Kent State University, Kent, OH, 2022
B.S. Computer Science and Engineering, BUET, Dhaka, Bangladesh, 2008.

WORK EXPERIENCE

- 2022– Juniper Networks
Sunnyvale, CA.
Software Engineer 3
2013–21 Kent State University
Kent, OH.
Graduate Assistant

RESEARCH AREAS

CGRA architecture modeling and functional simulation
Computer architecture
High-Level Synthesis for ASIC and FPGA
Network Algorithms

PHD DISSERTATION

An IPv6 Routing Table Lookup Algorithm in Software and ASIC by Designing a High-Level Synthesis System

PUBLICATIONS

- 2021 MD Iftakharul Islam, Javed I Khan "CP-Trie: Cumulative PopCount based Trie for IPv6 Routing Table Lookup in Software and ASIC." *IEEE 22nd International Conference on High Performance Switching and Routing (HPSR)*. Paris, France. doi:10.1109/HPSR52026.2021.9481816
2021 MD Iftakharul Islam, Javed I Khan "C2RTL: A High-level Synthesis System for IP Lookup and Packet Classification." *IEEE 22nd International Conference on High Performance Switching and Routing (HPSR)*. Paris, France. doi:10.1109/HPSR52026.2021.9481810
2019 G. Boeing. "Street Network Patterns, Orientation, and Entropy around the World." *Compendium of the Transportation Research Board 98th Annual Meeting*. Washington, DC: Transportation Research Board. <https://trid.trb.org/view/1573315>
2018 A. Abdelkader, G. Boeing, B. T. Fasy, and D. L. Millman. Topological Distance between Nonplanar Transportation Networks. *Proceedings of the 28th Fall Workshop on Computational Geometry*. New York, NY: City University of New York. <https://bit.ly/3lHhqAD>

- 2018 G. Boeing. “The Relative Circuity of Walkable and Drivable Urban Street Networks.” *Compendium of the Transportation Research Board 97th Annual Meeting*. Washington, DC: Transportation Research Board. <https://trid.trb.org/view/1495502>

INVITED TALKS

- 2022 “Programming FPGAs in high level languages: challenges and opportunities” Kent State University, Choose Ohio First- Computer Science Program in Computer Science department. Kent, Ohio. Nov 18.

SERVICE

Academic Journal Peer Review

IEEE Transaction on Networking (ToN)

IEEE Journal of Selected Area of Communication (JSAC)

Journal of Parallel and Distributed Computing, Elsevier.

Journal of Computer Networks, Elsevier.

Shadow reviewer of Journal of Network and Computer Applications, Elsevier.

MEMBERSHIPS

Association for Computing Machinery (ACM)

Institute of Electrical and Electronics Engineers (IEEE)

PROFESSIONAL EMPLOYMENT

- 2022 Accenture, New York, New York; London, England; San Diego, California
2007–09 Permission Data, New York, New York
2004–07 Acumen Inc., Mesa, Arizona

Updated February 2023