# MD Iftakharul Islam

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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.

### **RESEARCH AREAS**

CGRA and GPU Compiler High-Level Synthesis Network Algorithms

#### PHD DISSERTATION

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

## **PUBLICATIONS**

- 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
- 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
- MD Iftakharul Islam, Javed I Khan "SAIL based FIB lookup in a programmable pipeline based Linux router." *IEEE 20th International Conference on High Performance Switching and Routing (HPSR)*. Xi'an, China. doi:10.1109/HPSR.2019.8808129
- 2019 MD Iftakharul Islam, Javed I Khan "Leveraging Domino to implement RCP in a stateful programmable pipeline." *IEEE 20th International Conference on High Performance Switching and Routing (HPSR)*. Xi'an, China. doi:10.1109/HPSR.2019.8808107
- MD Iftakharul Islam, Javed I Khan "A network-centric TCP for interactive video delivery networks (VDN)." *IEEE 25th International Conference on Network Protocols (ICNP) Workshop PVE-SDN*.

  Toronto, ON, Canada. doi:10.1109/ICNP.2017.8117596
- MD Iftakharul Islam, Javed I Khan "Video splicing techniques for P2P video streaming." *IEEE 35th International Conference on Distributed Computing Systems (ICDCS) Workshops.* Columbus, OH, USA. doi:10.1109/ICDCSW.2015.23
- 2009 MD Iftakharul Islam, Md Mostofa Akbar "Heuristic algorithm of the multiple-choice multidimensional knapsack problem (MMKP) for cluster computing." 12th International Conference on Computers and Information Technology. Dhaka, Bangladesh. doi:10.1109/ICCIT.2009.5407147

## **INVITED TALKS**

"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) - 2021, 2022, 2023 IEEE Journal of Selected Area of Communication (JSAC) - 2019 Journal of Parallel and Distributed Computing (JPDC) - 2021

# PROFESSIONAL EMPLOYMENT

2022	Software Engineer 3, Juniper Networks, Sunnyvale, CA, USA
2013-21	Graduate Teaching Assistant, Kent State University, Kent, OH, USA
2015–15	Software Engineer Intern, inContact, Columbus, OH, USA
2014-14	Software Engineer Intern, RightRez, Bloomington, IN, USA
2012-13	Senior Software Engineer, GenWeb2, Dhaka, Bangladesh.
20I0-II	Software Engineer, KB Group, Dhaka, Bangladesh.
2009-10	Software Engineer, Arista Enterprises, Dhaka, Bangladesh.
2008-09	Software Engineer, SDSL, Dhaka, Bangladesh.