MD Iftakharul Islam

Staff Engineer
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tamimcse.github.io

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 and Simulator

High-Level Synthesis compiler

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 "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

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

2019   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

2017   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

2015   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 (ICCIT)*. Dhaka, Bangladesh. doi:10.1109/ICCIT.2009.5407147

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 (JPDC)

TECHNICAL SKILLS

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PROFESSIONAL EMPLOYMENT

2023–   Staff Engineer, Samsung Austin Semiconductor, San Jose, CA, USA

2022–23   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.

2010–11   Software Engineer, KB Group, Dhaka, Bangladesh.

2009–10   Software Engineer, Arista Enterprises, Dhaka, Bangladesh.

2008–09   Software Engineer, SDSL, Dhaka, Bangladesh.