# MD Iftakharul Islam

Department of Computer Science Kent State University Kent, OH. mislam4@kent.edu +1 330 389 3188 tamimcse.github.io

### **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 CAD algorithms 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**

- C. Higgs, A. Alderton, J. Rozek, D. Adlakha, H. Badland, G. Boeing, A. Both, E. Cerin, M. Chandrabose, C. De Gruyter, L. Gunn, A. De Livera, E. Hinckson, S. Liu, S. Mavoa, J. Sallis, K. Simons, and B. Giles-Corti. "Calculation of Policy-Relevant Spatial Indicators of Urban Liveability: Experiences of Scaling a Research Programme from Local to Global." 10<sup>th</sup> State of Australasian Cities Conference. Melbourne, Australia: APO. doi:10.25916/jbnk-hp52
- G. Boeing. "Street Network Patterns, Orientation, and Entropy around the World." *Compendium of the Transportation Research Board 98<sup>th</sup> Annual Meeting*. Washington, DC: Transportation Research Board. https://trid.trb.org/view/1573315
- A. Abdelkader, G. Boeing, B. T. Fasy, and D. L. Millman. Topological Distance between Nonplanar Transportation Networks. *Proceedings of the 28<sup>th</sup> Fall Workshop on Computational Geometry*. New York, NY: City University of New York. https://bit.ly/3lHhqAD
- G. Boeing. "The Relative Circuity of Walkable and Drivable Urban Street Networks." *Compendium of the Transportation Research Board 97<sup>th</sup> 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**

American Behavioral Scientist

American Journal of Sociology

American Sociological Review

Annals of the American Association of Geographers

Applied Network Science

Case Studies on Transport Policy

Cities

Computers, Environment and Urban Systems

Environment and Planning A: Economy and Space

Environment and Planning B: Urban Analytics and City Science

European Physical Journal: Data Science

Geo: Geography and Environment

Geographical Analysis

International Journal of Geographical Information Science

International Planning Studies

International Regional Science Review

ISPRS International Journal of Geo-Information

Journal of the American Planning Association

Journal of Open Source Education

Journal of Planning Education and Research

Journal of Planning Literature

Journal of Transport and Land Use

Journal of Transport Geography

Journal of Urban Design

Journal of Urban History

Journal of Urban Technology

Journal of Urbanism

Landscape and Urban Planning

Mathematics

Nonlinear Dynamics

Physica A: Statistical Mechanics and Its Applications

PLOS One

Proceedings of the National Academy of Sciences

The Professional Geographer

Region

Research in Transportation Economics

Scientific Reports

Social Forces

Social Indicators Research

Sustainability

Sustainable Cities and Society

Town Planning Review

Transactions in GIS

Transport Findings

Transport Policy

Transport Reviews

Transportation Research Part D: Transport and Environment

Transportation Research Record

Urban Design International

Urban Planning

Urban Science

Urban Studies

## **Academic Press Peer Review**

Cambridge University Press

Routledge

Springer Nature

# **Funding Agency Peer Review**

Israel Science Foundation

National Science Foundation

Research Grants Council of Hong Kong

Social Sciences and Humanities Research Council of Canada

United Arab Emirates University, Office of Associate Provost for Research

## Service to the Field

Review and Appraisal Committee, Association of Collegiate Schools of Planning, 2021–22

Program Committee, Spatial Data Science Symposium, 2021–22

Co-Lead, Emerging Data and Technologies track, World Society for Transport and Land Use Research Conference, 2021

Outreach and Engagement Task Force, Association of Collegiate Schools of Planning, 2019–2021

Program Committee, Future Cities Challenge, 2019-20

Review and Appraisal Committee, Association of Collegiate Schools of Planning, 2018–20

Scientific Committee, Symposium on Simulation for Architecture and Urban Design, 2018–20

Book review editor, Berkeley Planning Journal, 2013–14

# Service to the University

USC Healthy Campus Built Environment and Sustainability Committee, 2022–23

USC Price Ph.D. Degree Committee, 2020-23

USC Price Research Committee, 2020-21

USC Price Urban Planning and Development Ph.D. Admissions Subcommittee (chair), 2020-21

USC DUPSA Hiring Search Committee, 2019-20

Northeastern CSSH Standing Committee on Digital Proficiencies and Quantitative Methods, 2018–19

UC Berkeley DCRP Ph.D. program faculty representative, 2015–16

UC Berkeley DCRP Ph.D. program admissions committee, 2015–16

#### **Doctoral Committees**

Robert Binder, USC Price, exam committee

Seongmoon Cho, USC Price, exam committee

David Rosas Flores, USC Price, exam and dissertation committees

James Gross, USC Price, exam committee

Jaehyun Ha, USC Price, exam committee

Naomi Lee, USC Price, exam committee

Thu Nguyen, USC Price, exam committee

Clemens Pilgram, USC Price, exam and dissertation committees

Bonnie Wang, USC Price, exam committee

Mengya Xu, USC Spatial Sciences Institute, exam committee

Li Yi, USC Spatial Sciences Institute, exam and dissertation committees

#### **Studio Review Jury**

MIT, Workshop on Geographic Information Systems (Prof. Sarah Williams), Fall 2018

#### **MEMBERSHIPS**

American Association of Geographers

American Planning Association

Association of Collegiate Schools of Planning

Association for Computing Machinery

Complex Systems Society

Network Science Society
New York Academy of Sciences
Project Management Institute
Python Software Foundation
Regional Studies Association
Urban Affairs Association

# PROFESSIONAL EMPLOYMENT

2009–13 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