Mohammad Imrul Jubair

Faculty, Computer Science and Engineering, Ahsanullah University of Science and Technology, Bangladesh.

mohammadimrul.jubair@ucalgary.ca • +88 01722 68 27 83 • imruljubair.github.io

EDUCATION

MSc. in Computer Science

University of Calgary, Canada.

Sep 2014 – Dec 2016

- Courses: Visualization of Scientific Data, Modelling for Computer Graphics, Rendering and Image analysis & Computer Vision.
- Thesis: "Icosahedral Maps for a Multiresolution Representation of Earth Data".

Url: hdl.handle.net/11023/3527 Slides: bit.ly/jubair-msc-slides Supervisor: **Dr. Usman R. Alim**

BSc. in Computer Science & Information Technology

• Islamic University of Technology, Bangladesh.

Jan 2008 - Oct 2011

• Thesis: "An Enhanced Decision Based Adaptive Median Filtering Technique to Remove Salt and Pepper Noise in Digital Images".

INTERESTS

• Computer Vision • Image Processing • Visualization • Computer Graphics

AWARDS

■ Grant for <i>Teaching for Active Learning Course</i> , AUST.	Sep 2018
 Workshop Grant, German Climate Computing Center (DKRZ). 	Oct 2016
■ CPSC Travel Award, University of Calgary.	Oct 2016
■ Research Award (1st year of MSc), University of Calgary.	Sep 2015 – Sep 2016
■ Research Award (2nd year of MSc), University of Calgary.	Sep 2014 – Sep 2015
■ International Recruitment Graduate Award, University of Calgary.	Sep 2014 – Sep 2015
■ Undergraduate Student Scholarship, Islamic University of Technology.	Jan 2008 – Oct 2011

TEACHING EXPERIENCE

- **Faculty**, Department of Computer Science and Engineering, Oct 01, 2012 Present Ahsanullah University of Science and Technology, Bangladesh.
 - Courses: Image Processing, Distributed Database Systems, Computer Graphics.
- **Teaching Assistant**, Department of Computer Science, Sep 01, 2014 Dec 31, 2016 University of Calgary.
 - Course: Python programming.

RESEARCH EXPERIENCE

• **Research Assistant**, Visualization & Graphics Group (VISAGG) at Graphics Jungle Lab, University of Calgary.

Sep 2014 – Dec 2016

• **Research Collaborator**, German Climate Computer Center (DKRZ).

Sep 2014 – Dec 2016

TRAINING

• Trainee, Asia Pacific Communication Limited, Bangladesh.

Oct 18, 2010 - Nov 25, 2010

■ **Training on** *Teaching for Active Learning 2018*,

Aug 29, 2018 – Sep 1, 2018

by Foundation for Learning, Teaching and Research, Bangladesh.

SKILLS

MATLAB, Python, C, C++, GLSL, CUDA.

■ github.com/imruljubair

PUBLICATIONS

CONFERENCE

[1] **Jubair M. I.**, Alim U., Röber N., Clyne J. & Mahdavi-Amiri A., "Icosahedral Maps for a Multiresolution Representation of Earth Data", *21st International Symposium on Vision*, *Modeling and Visualization*, Bayreuth, pp. 161-168, Oct 2016.

- [2] **Jubair M. I.**, Alim U., Röber N., Clyne J., Mahdavi-Amiri A. & Samavati. F., "Multiresolution Visualization of Digital Earth Data via Hexagonal Box Spline Wavelets", (Poster), *IEEE Scientific Visualization Conference*, Chicago, Oct 2015.
- [3] **Jubair M. I.** & Banik P., "A Technique to Detect Books from Library Bookshelf Image", *IEEE 9th International Conference on Computational Cybernetics*, Hungary, 2013.
- [4] **Jubair M. I.**, Rahman M. M., Ashfaqueuddin S. & Ziko I. M., "An Enhanced Decision Based Adaptive Median Filtering Technique to Remove Salt and Pepper Noise in Digital Images", *14th International Conference on Computer and Information Technology*, Dhaka, 2011.

JOURNAL

- [1] **Jubair M. I.** & Banik P., "A Simplified Method for Handwritten Character Recognition from Document Image", *International Journal of Computer Applications*, vol. 51, no. 14, pp. 50–54, 2012.
- [2] Rahman M. M., Ahmed F., **Jubair M. I.**, Ashfaqueuddin S. & Ziko I. M., "An Enhanced Non-Linear Adaptive Filtering Technique for Removing High Density Salt-and-Pepper Noise", *International Journal of Computer Applications*, vol. 38, no. 11, pp. 7–12, 2012.

FOR MORE: bit.ly/jubair-gscholar

ONGOING PROJECT

Real Time Bangladeshi Sign Language (BdSL) Detection

Apr 2018 - Present

- In this project we are developing a technique to detect Bangladeshi Sign Language (BdSL) from images in real time using neural networks. For this purpose, we develop a dataset **BdSLImset** (**B**angladeshi Sign Language Image Dataset) to train our system. The dataset is available here: github.com/imruljubair/bdslimset
- A paper titled as 'Real Time Bangladeshi Sign Language Detection using Faster R-CNN' is submitted at *International Conference on Innovation in Engineering and Technology (ICIET) 2018* and is currently under review.

TALKS

- **Presentation at workshop** on "*Using Wavelets to Compress ICON and MPAS data sets*". Host: German Climate Computing Center (DKRZ), Germany. Oct 14, 2016
- **Seminar talk** on − "*Icosahedral Maps for a Multiresolution Representation of Earth Data*". Host: Department of Computer Science, University of Calgary. Dec 02, 2016
- **Presentation** on "Icosahedral Maps for a Multiresolution Representation of Earth Data", at VMV 2016, Bayreuth. Oct 2016
- **Presentation** on "A Hexagonal Box Spline Wavelet for Level of Detail Visualization of Digital Earth Data", at Computer Science Industrial Day 2015, University of Calgary. Dec 2015

MISCELLANEOUS

■ Convener, Programming Contest, AUST CSE WEEK 2018,

Jul 2018

■ **Volunteer**, CSEdWeek 2016, University of Calgary.

Dec 2016 Sep 2014 – Dec 2016

■ **Member**, Bangladeshi Student Association, University of Calgary.

Nov 2010 – Oct 2011

• **Vice President**, Islamic University of Technology Computer Society.

Jan 2011 - Oct 2011

Microsoft Student Partner, Islamic University of Technology.
 Organizing Member, IUT 3rd National ICT Fest, Bangladesh.

Apr 2011

■ YouTube Channel (2D animation): youtube.com/user/jubairization

[CV updated on 2018-10-14]