

# Mohammad Imrul Jubair

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## EDUCATION

### MSc. in Computer Science

- **University of Calgary, Canada.** Sep 2014 – Dec 2016
  - CGPA: 3.775 / 4.00
  - 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](http://hdl.handle.net/11023/3527)  
Slides: [bit.ly/jubair-msc-slides](http://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
  - CGPA: 3.85 / 4.00
  - 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 Teaching for Active Learning Course, 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](https://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, publisher: The Eurographics Association, 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, pp. 151–152, publisher: IEEE, 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, pp. 359–363, publisher: IEEE, 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, pp. 428–433, publisher: IEEE, 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](http://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** (*Bangladeshi Sign Language Image Dataset*) – to train our system. The dataset is available here: [github.com/imruljubair/bdslimset](https://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
- **Member**, Bangladeshi Student Association, University of Calgary. Sep 2014 – Dec 2016
- **Vice President**, Islamic University of Technology Computer Society. Nov 2010 – Oct 2011
- **Microsoft Student Partner**, Islamic University of Technology. Jan 2011 – Oct 2011
- **Organizing Member**, IUT 3rd National ICT Fest, Bangladesh. Apr 2011
- **YouTube Channel** (2D animation): [youtube.com/user/jubairization](https://youtube.com/user/jubairization)

[CV updated on 2018-10-10]