# Curriculum Vitae

1.	NAME	: DR. MD. SAIDUR RAHMAN
2.	Date of birth	: 31 December 1966
3.	Present position	: Professor, Dept of Computer Science and Engineering, BUET
4. Mailing Address		: Department of Computer Science and Engineering Bangladesh University of Engineering and Technology Dhaka 1000, Bangladesh. Email: <u>saidurrahman@cse.buet.ac.bd</u> , <u>dmsrahman@gmail.com</u> URL: <u>http://teacher.buet.ac.bd/saidurrahman/</u>
		Cell Phone: 01819482136

# 5. Academic Qualifications:

Degree/ Examination	Institution (University/College/School /Department)	Year
Ph.D.	Dept. of System Information Sciences, Graduate School of Information Sciences, Tohoku University, Sendai 980-8579, Japan	1999
M.Sc. (Master of Information Sciences)	Dept. of System Information Sciences, Graduate School of Information Sciences, Tohoku University, Sendai 980-8579, Japan	1996
M.Sc. Engg.	Dept. of Computer Science & Engineering, Bangladesh University of Engineering & Technology (BUET), Dhaka 1000, Bangladesh	1992
B.Sc. Engg.	Dept. of Electrical & Electronic Engineering, Bangladesh University of Engineering & Technology (BUET), Dhaka 1000, Bangladesh	1989
Higher Secondary Certificate (H.S.C.)	Dhaka College, Dhaka, Bangladesh	1983
Secondary School Certificate (S.S.C.)	Santhia High School, Santhia, Pabna, Bangladesh	1981

# 6. Experiences (start from present):

Position	Organization	Duration
Professor	Dept. of Computer Science & Engineering, Bangladesh University of Engineering & Technology (BUET), Dhaka 1000, Bangladesh	16 October 2006 to date (Served as Head of the Department from 23 October 2007 to 23 October 2009)
Associate Professor	Dept. of Computer Science & Engineering, Bangladesh University of Engineering & Technology (BUET), Dhaka 1000, Bangladesh	27 August 2005 – 15 October 2006
Associate Professor	Dept. of System Information Sciences, Graduate School of Information Sciences, Tohoku University, Sendai 980-8579, Japan	01 April 2003 – 16 July 2004 (within the extra-ordinary leave from BUET from 23 November 2001 to 16 July 2004)
Special Foreign Researcher (under JSPS Postdoctoral Fellowship)	Dept. of System Information Sciences, Graduate School of Information Sciences, Tohoku University, Sendai 980-8579, Japan	27 November 2001 – 31 March 2003 (within the extra-ordinary leave mentioned above)
Assistant Professor	Dept. of Computer Science & Engineering, Bangladesh University of Engineering & Technology (BUET), Dhaka 1000, Bangladesh	11 April 1999 – 26 August 2005 (on extra-ordinary leave without pay from 23 November 2001 to 16 July 2004, on leave from 22 December 2004 to 11 March 2005)
Lecturer	Dept. of Computer Science & Engineering, Bangladesh University of Engineering & Technology (BUET), Dhaka 1000, Bangladesh	29 April 1991 – 10 April 1999 (on leave from 01 April 1993 to 31 March 1999)
Assistant Engineer	Institute of Computer Science, Atomic Energy Research Establishment, Bangladesh Atomic Energy Commission, Savar, Dhaka, Bangladesh	28 March 1990 – 28 April 1991

# 7. Research Visits

Position	Organization	Duration
Visiting Scholar	Kwansei Gakuin University,	January 6, 2017 to March 28,
	Japan	2017
Visiting Scholar	Kyoto University, Japan	December 15, 2013 to
		February 12, 2014
Visiting Researcher	University of Dortmund,	September 14, 2010 to
	Germany	September 21, 2010
Visiting Researcher	KAIST, Korea	April 15, 2010 to April 23,
		2010
Visiting Researcher	Tohoku University, Japan	February 21, 2010 to March 8,
		2010
Visiting Researcher	Tohoku University, Japan	December 10, 2007 to January
		12,2008

Visiting Researcher	Tohoku University, Japan	December 23, 2004 to March
		11, 2005

- 8. Membership/Fellowship of Learned Societies:
  - Fellow, Bangladesh Academy of Sciences.
  - *Fellow* (F-7169), The Institution of Engineers, Bangladesh.
  - Fellow (F-160), Bangladesh Computer Society.
  - Senior Member (M-40294799), IEEE
  - Student Member, Information Processing Society of Japan (from 1995 to 1999).
- 9. Professional Awards / Honours Received:
  - Award
    - University Grants Commission Award 2004
    - FUNAI Information Technology Award for Young Researchers 2004
    - Bangladesh Academy of Sciences Gold Medal Award for Junior Scientists 2003.
  - Scholarship and Fellowship
    - Received JSPS Postdoctoral Fellowship from November 2001 to March 2003. (Research Title: Graph Drawing Algorithms.)
    - Received MONBUSHO Scholarship from April 1993 to March 1999.
    - Received merit scholarships in all levels of education in Bangladesh.
  - 10. Research Interest:

Established a research group together with graduate and undergraduate students of the department of CSE and arranging a research presentation session every week. The fields of interest of this group are:

- Graph Algorithms
- Graph Drawing Algorithms
- VLSI Layout Algorithms
- Computational Geometry
- Generating Problems
- Internet Routing Protocols
- Bioinformatics

11. Research Grants Received:

- Received a grant of Taka 8,80,000 from Minstry of Science and Information & Communication Technology, Government Bangladesh for the project *Facility Upgradation for Sustainable Research on Graph Drawing and Information Visualization* in fiscal year 2009-2010.
- Received grant-in-aid for scientific research (Tokubetsu Kenkyuin Shorei-hi) from JSPS for doing research on *graph drawing algorithms* as follows:
  - o 400,000 yen in 2001
  - 900,000 yen in 2002
- Received a grant of 270,000 yen from Telecommunication Advancement Foundation in 2003.

#### 12. Professional Work at National and International Levels:

A. Program Committee Member

- a) 5<sup>th</sup> International Conference on Computer and Information Technology (ICCIT 2002), held in Dhaka, Bangladesh
- b) 11<sup>th</sup> International Symposium on Graph Drawing (GD 2003), held in Perugia, Italy.
- c) 13<sup>th</sup> International Symposium on Graph Drawing (GD 2005), held in Limerick, Ireland.
- d) 17<sup>th</sup> Annual International Symposium on Algorithms and Computation (ISAAC 2006), held in Kolkata, India.
- e) 1<sup>st</sup> Workshop on Algorithms and Computation (WALCOM 2007) held in Dhaka, Bangladesh – Program Co-chair
- f) 15<sup>th</sup> International Symposium on Graph Drawing (GD 2007), held in Sydney, Australia.
- g) 2<sup>nd</sup> Workshop on Algorithms and Computation (WALCOM 2008) held in Dhaka, Bangladesh – Program Co-chair
- h) 3<sup>rd</sup> Workshop on Algorithms and Computation (WALCOM 2009) held in Kolkata, India.
- i) 4<sup>nd</sup> Workshop on Algorithms and Computation (WALCOM 2010) held in Dhaka, Bangladesh Program Co-chair
- j) 3<sup>rd</sup> Annual Meeting of Asian Association for Algorithms and Computation (AAAC 2010), held in Pohang, Korea.
- k) 4th Annual Meeting of Asian Association for Algorithms and Computation (AAAC 2011), held in Hsinchu, Taiwan.
- 1) 22nd Annual International Symposium on Algorithms and Computation (ISAAC 2011), held in Yokohama, Japan.
- m) 5th Annual Meeting of Asian Association for Algorithms and Computation (AAAC 2012), held in Shanghai, China.
- n) 5th IEEE Pacific Visualization Symposium (PacificVis 2012), held in Songdo, Korea.
- o) 6th Workshop on Algorithms and Computation (WALCOM 2012) held in Dhaka, Bangladesh – Program Co-chair
- p) 7th Workshop on Algorithms and Computation (WALCOM 2013) held in Kharagpur, India
- q) 9th Workshop on Algorithms and Computation (WALCOM 2015) held in Dhaka, Bangladesh
- r) 10th Workshop on Algorithms and Computation (WALCOM 2016) held in Kathmandu, Nepal
- s) 27th International Symposium on Algorithms and Computation (ISAAC 2016) to be held in Sydney, Australia.
- t) 11th International Conference and Workshops on Algorithms and Computations (WALCOM 2017) held in Hsinchu, Taiwan Program Co-chair
- u) 11th International Frontiers of Algorithmics Workshop (FAW2017) to be held in Chengdu, China.

# B. Guest Editor

Journal of Graph Algorithms and Applications Journal of Combinatorial Optimization Discrete Mathematics, Algorithms and Applications

### C. Served as a Referee

- i Journal
  - a) ACM Transections on Algorithms
  - b) Journal of Discrete Algorithms
  - c) Theoretical Computer Science
  - d) Discrete Mathematics, Algorithms and Applications
  - e) SIAM Journal on Computing
  - f) Algorithmica
  - g) Journal of Graph Algorithms and Applications
  - h) Discrete Mathematics
  - i) International Journal of Foundations of Computer Science
  - j) Computational Geometry: Theory and Applications
  - k) Information Processing Letters
  - 1) IEICE Trans. Fundamentals
  - m) Journal of the Institution of Engineers, Bangladesh

#### ii Conference

- a) 1<sup>st</sup> International Conference on Computer and Information Technology (ICCIT 1998)
  - b) 7<sup>th</sup> International Symposium on Graph Drawing (GD 1999)
  - c) International Workshop on Algorithms and Data Structures (WADS 2001)
  - d) 8<sup>th</sup> International Annual Computing and Combinatorics Conference (COCOON 2002)
  - e) 13th Annual International Symposium on Algorithms and Computations (ISAAC 2002)
  - f) 9<sup>th</sup> International Annual Computing and Combinatorics Conference (COCOON 2003)
  - g) 10<sup>th</sup> International Annual Computing and Combinatorics Conference (COCOON 2004)
  - h) 12<sup>th</sup> International Symposium on Graph Drawing (GD 2004)
  - i) 7<sup>th</sup> International Conference on Computer and Information Technology (ICCIT 2004)
  - J) International Conference on Electrical and Computer Engineering 2004 (ICECE 2004)
  - k) 31<sup>st</sup> Workshop on Graph-Theoretic Concepts in Computer Science (WG 2005)
  - 16<sup>th</sup> Annual International Symposium on Algorithms and Computation (ISAAC 2005)
  - m) IEEE PacificVis 2008
  - n) Graph Drawing 2008
  - o) Graph Drawing 2011
  - p) ISAAC 2011
  - q) SoCG 2011
  - r) MFCS 2012
  - s) ICECE 2012
  - t) SoCG 2012

- u) SoCG 2013
- v) FCT 2013
- w) COCOON 2014
- x) WG 2017
- D. Organizing Committee Member

Served as a steering committee member and the chairman of reception and decoration committee for organizing International Collegiate Programming Contest (ICPC), 2001 Dhaka site regional contest.

- 13. Participation in National Commissions, Committees, etc. commissioned by the Government of Bangladesh and Govt. Institution / Organizations:
  - 2007 to 2009: Council Member, Bangladesh Computer Council.
  - 2007 to 2009: Member, ICT Taskforce, Government of Bangladesh.
  - **2007 to date:** *External Member,* Syllabus Committee of Dept. of Computer Science and Engineering, Khulna University, Khulna, Bangladesh.
  - **2005-2006**: *Member*, Application Evaluation Committee (AEC) for recruitments of IT Specialist and MIS Specialist Consultants of Bangladesh Water Supply Program Project of Department of Public Health Engineering, Government of Bangladesh.
  - 2005-2006: *Consultant*, leader of a subcommittee of "Analysis, Design and Implementation of Backbone Connectivity, LAN, MAN, WAN and Related Service Setup at Bangladesh Secretariat" project.
  - 2004: *Member*, Selection Committee for recruitments in "Development of Infrastructure for IT Applications" project of Bangladesh Computer Council (BCC).
  - **2001:** *Chairman,* Information Technology Branch Committee for establishing national standards of IT goods, Bangladesh Standards and Testing Institution (BSTI).

Course No. and Title of the Courses Taught	Level	No. of Students	(Lectures Per Week) or (Hrs / Week)	Year
CSE 421: Basic Graph Theory	Undergraduate	40		2016
CSE 305: Computer Architecture	Undergraduate	120		2015
CSE 421: Basic Graph Theory	Undergraduate	60	3	2015
CSE 641: Algorithm Engineering	Undergraduate	60	3	2013-2014
CSE 6403: Computational Geometry	Graduate	15	3	2013
CSE 421: Basic Graph Theory	Undergraduate	35	3	2013
CSE 6410: Advanced Algorithmic Graph Theory	Graduate	30	3	2012
CSE 207: Algorithms	Undergraduate	60+60	3+3	2012
CSE 421: Basic Graph Theory	Undergraduate	60	3	2011
CSE 643: Computational Geometry	Undergraduate	30	3	2010
CSE 6405: Graph Drawing	Graduate	20	3	2010
CSE 6404: VLSI Layout Algorithms	Graduate	30	3	2009

14. Teaching activities undertaken (course and laboratory) at undergraduate and graduate levels:

Course No. and Title of the Courses Taught	Level	No. of Students	(Lectures Per Week) or (Hrs / Week)	Year
CSE 421: Basic Graph Theory	Undergraduate	60	3	2009
CSE 203: Data Structures	Undergraduate	60	3	2009
CSE 6405: Graph Drawing	Graduate	15	3	2008
CSE 421N: Graph Theory	Undergraduate	60	3	2007
CSE 6404: VLSI Layout Algorithms	Graduate	20	3	2007
CSE 6405: Graph Drawing	Graduate	20	3	2006-2007
CSE 421N: Graph Theory	Undergraduate	60	3	2006-2007
CSE 203N: Data Structures	Undergraduate	60 + 60	3+3	2006
CSE 6404: VLSI Layout Algorithms	Graduate	40	3	2005-2006
CSE 103N: Discrete Mathematics	Undergraduate	60 + 60	3+3	2005
CSE 6403: Computational Geometry	Graduate	28	3	2005
CSE 304N: Database Sessional	Undergraduate	30	3	2004-2005
CSE 208N: Algorithms Sessional	Undergraduate	60	3	2004-2005
CSE 6900: Special Topics on Graph Drawing	Graduate	21	3	2004
Algorithm Theory*	Graduate	70	1.5	2004
Advanced Seminar on System Information Sciences A*	Graduate	25	4	2003-2004
Advanced Seminar on System Information Sciences B*	Graduate	25	4	2003-2004
Data Structures and Algorithms*	Undergraduate	50	1.5	2003-2004
Algorithm Theory*	Graduate	70	1.5	2003
CSE 6401: Graph Theory	Graduate	20	3	2001
CSE 401: Computer Networks	Undergraduate	47	3	2001
CSE 402: Computer Networks Sessional	Undergraduate	47	3	2001
CSE 318: Software Development	Undergraduate	24	3	2001

NB. \* marked courses were taught in Tohoku University, Japan as an Associate Professor and the other courses were taught in the dept. of CSE, BUET. Taught Algorithms, Data Structures, Compiler Design, Operating System and Software Engineering courses in East-West University as an adjunct faculty during 2006-2012.

### 15. Supervision of Thesis/Design Project at Undergraduate Level

Supervised more than 80 undergraduate students in the dept. of CSE, BUET in the field of Graph Drawing, Generating Problems, VLSI Layout Algorithms, Electronic Voting, Bioinformatics etc.

Currently supervising 08 undergraduate students.

Served as a research mentor of two undergraduate students in Nishizeki Laboratory, Graduate School of Information Sciences, Tohoku University, Japan.

## <sup>16.</sup> Supervision of Graduate Research Work:

Level (Masters/ Ph.D.)	Name of Students	Thesis Title	Year
------------------------------	------------------	--------------	------

Ph. D.	Md. Iqbal Hossain	Straight-line drawings of planar graphs with constraints	2015
Ph. D.	Md. Rezaul Karim	Straight-line Grid Drawings of Planar Graphs with Sub-Quadratic Area	2008
M.Sc. Engg.	Shafique Ahmed Faruque	Development of Graph Theoretic Models for Business Promotion on Social Networks	2013
M.Sc. Engg.	Aftab Hussain	Software Restructuring using Hierarchical Clustering	2012
M.Sc. Engg.	Md. Manzurul Hasan	Box-rectangular Drawings of Planar Graphs	2012
M.Sc. Engg.	Shaheena Sultana	Algorithms for Bar 1-visibility Representations of Graphs	2011
M.Sc. Engg.	Md. Emran Chowdhury	Point-set Embeddings of Planar Graphs with Fewer Bends	2011
M.Sc. Engg.	Muhammad Jawaherul Alam	Minimum-Layer Drawings of Trees	2010
M.Sc. Engg.	Md. Shamsuzzoha Bayzid	On Pairwise Compatibility Graphs	2010
M.Sc. Engg.	Muhammad Abdullah Adnan	Minimum Segment Drawings of Outerplanar Graphs	2008
M.Sc. Engg.	Abul Hasan Samee	Minimum Segment Drawings of Series- Parallel Graphs With the Maximum Degree Three	2008
M.Sc. Engg.	Khaled Mahmud Shahriar	Bi-Chromatic Point Set Embeddings of Trees with Fewer Bends	2008
M.Sc. Engg.	Md. Shahidul Islam	A Simple Linear Algorithm For No-Bend Orthogonal Drawings of Series-Parallel Graphs	2007
M.Sc. Engg.	Abu Hasnat Mohammad Ashfak Habib	1-Bend Orthogonal Drawings of Triconnected Planar 4-Graphs	2007
M.Sc. Engg.	Tanveer Awal	Resource Partitioning of Planar Graphs	2007
M.Sc. Engg.	Utpal Kumar Paul	On st-Orientations and st-numbering of planar graphs	2007
M.Sc. Engg.	Md. Mostofa Ali Patwary	Hardness of Finding Minimum Face- Spanning Subgraphs of Plane Graphs	2006
M.Sc. Engg.	Mohammad Tanvir Irfan	Computing Beta-Drawings of 2- Outerplane Graphs	2006
M.Sc. Engg.	Mohammad Tanvir Parvez	Efficient Algorithms for Generating All Triangulations of Plane Graphs	2006
M.Sc. Engg.	Shubhashis Ghosh	Rectangular Drawings of Planar Graphs	2001
M.Sc. Engg.	Mahmuda Naznin	Orthogonal Drawings of Plane Graphs	2000

Currently supervising 3 Ph. D. students and 4 M.Sc. Engg. students in the dept. of CSE, BUET.

Supervised Shin-ichiro Kawano, a Ph. D. student of Gunma University, Japan, for his Ph. D. Internship Research from July 30, 2005 to October 27, 2005 in BUET, Bangladesh.

Served as a research mentor of three graduate students in Nishizeki Laboratory, Graduate School of Information Sciences, Tohoku University, Japan.

17. Contribution to Research and Development Projects:

- 2012-1014: Subproject Manager, HEQEP Subproject CP # 2082: Enhancement of Graduate Studies Facilities for the Department of CSE, BUET, UGC, Bangladesh.
- 2010-2011: Project Director, *Minimum-area Drawings of Planar Graphs*, CASR, BUET.
- 2009-2010: Project Director, Facility Upgradation for Sustainable Research on Graph Drawing and Information Visualization, Supported by Minstry of Science and Information & Communication Technology, Government Bangladesh
- 2008-2009: Project Director, Layered Drawings of Planar Graphs, CASR, BUET.
- 18. Contribution to the Department other than Teaching and Research:
  - a) Curriculum Improvement:

#### Postgraduate Courses

- **2012:** Designed a new course entitled "Advanced Algorithmic Graph Theory (CSE 6410)" which has been approved by the Academic Council of BUET.
- **2005:** Designed a new course entitled "Graph Drawing (CSE 6405)" which has been approved by the Academic Council of BUET.
- **2001:** Designed a new course entitled "VLSI Layout Algorithms (CSE 6404)" which has been approved by the Academic Council of BUET.

#### Undergraduate courses

- **2004-2006:** As a *member* of BUGS, actively participated in the revision of various old courses and inclusion of new courses of Theoretical Computer Science Group at undergraduate level. The revised syllabus has been approved by the Academic Council of BUET.
- **2001:** As a *member* of BUGS, actively participated in the revision of various old courses and inclusion of new courses at undergraduate level. The revised syllabus had been approved by the Academic Council of BUET.
- b) Laboratory Development:

### Establishment new laboratories

**2009-2010:** Established Graph Drawing and Information Visualization Lab in CSE dept. BUET under the project "Facility Upgradation for Sustainable Research on Graph Drawing and Information Visualization" supported by Ministry of Science and Information & Communication Technology, Govt. of Bangladesh.

**2007-2009**: Played key role in establishing VLSI Design Automation Lab and Wireless Networking Lab, AI and Robotics Lab in the department of CSE.

**2000-2001:** Actively participated in the establishment of three new laboratories: *Software Engineering Lab, Interfacing Lab, and Network Lab.* Worked as **lab-in-charge** while establishing *Network Lab.* 

### Preparing proposal for eight new laboratories

**2000-2001**: As a *member* of the Lab development committee, actively participated in the preparation of lab proposals for eight new laboratories in the CSE Department. These laboratories are: Microcomputer Lab-B, Digital Lab-B, Microprocessor and Interfacing Lab, Network and Communication Lab, Multimedia and Graphics Lab, Database and ISD Lab, AI and Robotics

#### Lab, VLSI Design Automation Lab.

#### c) Others:

i.Served in the editorial committee for publishing undergraduate course calendar which is published in January 2006.

ii.As a BPGS member, played important role in introducing thesis proposal presentation and pre-defence presentation for M.Sc. Engg. students of CSE department.

#### 19. Contribution to the University Administration:

- a) Head of the Department
  - 23 October, 2007 to 23 October 2009: Head, Department of Computer Science and Engineering, BUET
- b) Hall Administration:
  - 19 April 2005 to 31 March 2007: Assistant Provost, Ahsanullah Hall, BUET.
  - 1 January 2001 21 November 2001: Assistant Provost, Suhrawardy Hall, BUET.
- c) Chairman or Member of Committees:
  - 23 October, 2007 to 23 October, 2009: *Chairman*, Board Undergraduate Studies, CSE Department, BUET.
  - 23 October, 2007 to 23 October, 2009: *Chairman*, Board Postrgraduate Studies, CSE Department, BUET.
  - August 2005 to date: Member, Academic Council, BUET.
  - 2004: *Member*, Selection Committee for recruitment of Lab Attendant for CSE department BUET.
  - July 2004 to date & August 1999 November 2001: *Member*, Board of Postgraduate Studies, CSE Department, BUET.
  - April 2003 July 2004: *Member*, Academic Council, Graduate School of Information sciences, Tohoku University, Japan.
  - August 1999 November 2001: Secretary, Board of Postgraduate Studies, CSE Department, BUET.
  - April 1999 to date: *Member*, Faculty of Electrical & Electronic Engineering, BUET.
  - April 1991 to date: *Member*, Board of Undergraduate Studies, CSE Department, BUET.

#### 20. Names and Addresses of References:

1) *Prof. Takao Nishizeki, Ph D* Dept. of Informatics School of Science and Tech. Kwansei Gakuin University 2-1 Gakuen, Sanda 669-1337, Japan Email: <u>nishi@kwansei.ac.jp</u>

- (2) Prof. Shin-ichi Nakano, Ph D Department of Computer Science Faculty of Engineering Gunma University Kiryu 376-8515, Japan Email: <u>nakano@cs.gunma-u.ac.jp</u>
- (3) Prof. M. Kaykobad, Ph D
  Department of Computer Science and Engineering
  Bangladesh University of Engineering and Technology (BUET)
  Dhaka-1000, Bangladesh
  Email: <u>kaykobad@cse.buet.ac.bd</u>

# 21. LIST OF PUBLICATIONS

#### a) Text books

- 1. Md. Saidur Rahman, Basic Graph Theory, Undergraduate Topics in Computer Science, Springer, 2017.
- Takao Nishizeki and Md. Saidur Rahman, *Planar Graph Drawing*, World Scientific, Singapore, 2004 (a textbook for advanced undergraduate and graduate level). (The book appeared in the **bestseller** list of World Scientific in August 2005. Citation count in Google Scholar on April 04, 2017: 225)
- b) Contributions in published books
  - 1. Takao Nishizeki and Md. Saidur Rahman, *Rectangular drawing algorithms*, (Ed.) Roberto Tamassia, Handbook of Graph Drawing and Visualization, CRC Press, 2013.
  - 2. Md. Saidur Rahman, Convex Graph Drawing, Encyclopedia of Algorithms, Springer, Articlle, D: 430438, Chapter ID: 652, 2015.
  - 3. Md. Saidur Rahman and Takao Nishizeki, Graph drawing, Chapter 23 of Handbook of Graph Theory, Combinatorial Optimization, and Algorithms, CRC Press, 2015.

#### c) Edited Books

- 1. Sheung-Hung Poon, Md. Saidur Rahman and Hsu-Chun Yen (eds.), Proc. of WALCOM 2017, Lecture Notes in Computer Science, 10167, Springer 2017.
- 2. Md. Saidur Rahman and Shin-ichi Nakano (eds.), *WALCOM: Algorithms and Computation, Proc. of WALCOM 2012*, Lecture Notes in Computer Science, 7157, Springer, 2012.
- Md. Saidur Rahman and Satoshi Fujita (eds.), WALCOM: Algorithms and Computation, Proc. of WALCOM 2010, Lecture Notes in Computer Science, 5942, Springer, 2010.
- Shin-ichi Nakano, Md. Saidur Rahman (eds.), WALCOM: Algorithms and Computation, Proc. of WALCOM 2008, Lecture Notes in Computer Science, 4921, Springer, 2008.
- 5. M. Kaykobad and Md. Saidur Rahman (eds.), *WALCOM 2007*, Proceedings of Workshop on Algorithms and Computation, Bangladesh Academy of Sciences, 2007.

d) Journal Publications:

- Md. Iqbal Hossain, Sammi Abida Salma, Md. Saidur Rahman and Debajyoti Mondal, A necessary condition and a sufficient condition for pairwise compatibility graphs, Journal of Graph Algorithms and Applications, 21(3), pp. 341-352, 2017.
- Safique Ahmed Faruque, Mossa. Anisa Khatun and Md. Saidur Rahman, Modelling direct marketing campaign on social network, International Journal of Business Information Systems, 22(4), pp. 422-435, 2016.
- 3. Md. Iqbal Hossain and Md. Saidur Rahman, Good spanning trees in graph drawing, Theoretical Computer Science, 607, pp. 149-165, 2015.
- Md. Iqbal Hossain, and Md. Saidur Rahman, Straight-Line Monotone Grid Drawings of Series-Parallel Graphs, *Discrete Mathematics, Algorithms and Applications*, World Scientific, 2015.
- 5. Stephane Durocher, Debajyoti Mondal, Md. Saidur Rahman, *On graphs that are not PCGs,* Theoretical Computer Science, 571, pp. 78-87, 2015.
- Md. Manzurul Hasan, Md. Saidur Rahman, and Md. Rezaul Karim, Box-rectangular drawings of planar graphs, Journal of Graph Algorithms and Applications (JGAA), 17(6), pp. 629-646, 2013.
- 7. Debajyoti Mondal, Rahnuma Islam Nishat, Md. Saidur Rahman, and Sue Whitesides, *Acyclic coloring with few division vertices*, Journal of Discrete Algorithms, 23, pp. 42-53, 2013.
- 8. Md. Iqbal Hossain, Debajyoti Mondal, Md. Saidur Rahman, and Sammi Abida Salma, *Universal line-sets for drawing planar 3-trees*, Journal of Graph Algorithms and Applications (JGAA), 17(2), pp. 59-79, 2013.
- Sammi Abida Salma, Md. Saidur Rahman, and Md. Iqbal Hossain, *Triangle-free outerplanar* 3-graphs are pairwise compatibility graphs, Journal of Graph Algorithms and Applications (JGAA), 17(2), pp. 81-102, 2013.
- 10. Debajyoti Mondal, Sudip Biswas, Rahnuma Islam Nishat, and Md. Saidur Rahman, minimum-segment convex drawings of 3-connected cubic plane graphs, Journal of Combinatorial Optimization 25(3), pp. 460-480, 2013.
- 11. Debajyoti Mondal, Rahnuma Islam Nishat, Sue Whitesides, Md. Saidur Rahman, *Acyclic colorings of graph subdivisions revisited*, Journal of Discrete Algorithms, 16 pp. 90-103, 2012.
- 12. Rahnuma Islam Nishat, Debajyoti Mondal and Md. Saidur Rahman, *Point-Set Embeddings* of *Plane 3-Trees*, Computational Geometry: Theory and Application, 45, pp. 88-98, 2012.

- 13. Tanveer Awal and Md. Saidur Rahman, *A linear algorithm for resource-partitioning four connected planar graphs*, AKCE International Journal of Graphs and Combinatorics, 9(1), pp.11-20, 2012.
- Rahnuma Islam Nishat, Debajyoti Mondal and Md. Saidur Rahman, Visibility Drawings of Plane 3-Trees with Minimum Area. Mathematics in Computer Science, 5(1), pp. 119-132, 2011.
- 15. Md. Rezaul Karim, Md. Jawaherul Alam and Md. Saidur Rahman, *Straight-Line Grid Drawings of Label-Constrained Outerplanar Graphs with O(n log n) Area*, Journal of Graph Algorithms and Applications, 15(3), pp. 437-456, 2011.
- Mohammad Tanvir Parvez, Md. Saidur Rahman and Shin-ichi Nakano, *Generating All Triangulations of Plane Graphs*, Journal of Graph Algorithms and Applications, 15(3), pp. 457-482, 2011.
- 17. Debajyoti Mondal, Rahnuma Islam Nishat, Md. Saidur Rahman and Muhammad Jawaherul Alam, *Minimum-area drawings of plane 3-Trees*, Journal of Graph Algorithms and Applications, 15(2), pp. 177-204, 2011.
- Muhammad Nur Yanhaona, Md. Shamsuzzoha Bayzid and Md. Saidur Rahman, *Discovering Pairwise Compatibility Graphs*, Discrete Mathematics, Algorithms and Applications (DMAA), 2(4), pp. 607-623, 2010.
- Md. Mostofa Ali Patwary and Md. Saidur Rahman, *Minimum Face-Spanning Subgraphs of Plane Graphs*, AKCE International Journal of Graphs and Combinatorics, 7(2), pp.133-150, 2010
- Muhammad Jawaherul Alam, Md. Abul Hassan Samee, Mashfiqui Rabbi, Md. Saidur Rahman, *Minimum-layer upward drawings of trees*, Journal of Graph Algorithms and Applications, 14(2), pp. 245-267, 2010.
- 21. Muhammad Jawaherul Alam, Mashfiqui Rabbi, Md. Saidur Rahman and Md. Rezaul Karim, *Upright drawings of graphs on three layers*, J. Appl. Math. & Informatics, 28(5-6), pp. 1347-1358, 2010.
- 22. Tanveer Awal and Md. Saidur Rahman, A Linear algorithm for resource tripartitioning triconnected planar graphs, INFOCOMP Journal of Computer Science, 9(2), p. 39–48, 2010.
- 23. Md. Rezaul Karim and Md. Saidur Rahman, *On a class of planar graphs with straight-line grid drawings on linear area*, Journal of Graph Algorithms and Applications, 13(2), pp. 153-177, 2009.
- 24. Md. Saidur Rahman, Kazuyuki Miura and Takao Nishizeki, *Octagonal drawings of plane graphs with prescribed face areas*, Computational Geometry: Theory and Application, 42, pp. 214-230, 2009.
- 25. Md. Nur Yanhaona, K. S. M. Tozammel Hossain and Md. Saidur Rahman, *Pairwise compatibility graphs*, Journal of Applied Mathematics and Computing, 30, pp. 479-503, 2009.
- 26. Md. Rezaul Karim, Kaiser Md. Nahiduzzaman and Md. Saidur Rahman, *A Linear-Time Algorithm for k-Partitioning Doughnut Graphs*, INFOCOMP Journal of Computer Science, 8(1), pp. 8-13, 2009.
- 27. Muhammad Abdullah Adnan and Md. Saidur Rahman, *Generating all distributions of objects to bins,* International Journal of Computer Mathematics, 86(3), pp. 383 392, 2009.
- 28. Muhammad Abdullah Adnan and Md. Saidur Rahman, *Distribution of distinguishable objects to bins: generating all distributions*, International Journal of Computer Mathematics, 84(7), pp. 953-965, 2007.
- 29. Muhammad Abdullah Adnan and Md. Saidur Rahma, Efficient generation of evolutionary

trees, INFOCOMP Journal of Computer Science, 6(1), pp. 30-36, 2007.

- 30. Md. Saidur Rahman, <u>Noritsugu Egi</u> and <u>Takao Nishizeki</u>, *No-bend orthogonal drawings of* subdivisions of planar triconnected cubic graphs, <u>IEICE Transactions on Information and</u> <u>Systems, E88-D(1)</u>, pp. 23-30, 2005.
- 31. Md. Saidur Rahman, Takao Nishizeki and Shubhashis Ghosh, *Rectangular drawings of planar graphs*, Journal of Algorithms, 50, pp. 62-78, 2004.
- 32. Mohammad Mursalin Akon, Shah Asaduzzaman, Md. Saidur Rahman and Mitsuji Matsumoto, *Proposal for st-routing protocol*, Telecommunication Systems, 25(3, 4), pp. 287-298, 2004.
- 33. Takao Nishizeki, Kazuyuki Miura and Md. Saidur Rahman, *Algorithms for drawing plane graphs*, IEICE Transactions on Information and Systems, E87-D(2), pp. 281-289, 2004.
- 34. Md. Saidur Rahman, Takao Nishizeki and Mahmuda Naznin, *Orthogonal drawings of plane graphs without bends*, Journal of Graph Algorithms and Applications, 7(4), pp. 335-362, 2003.
- 35. Masud Hasan, Md. Saidur Rahman and Takao Nishizeki, *A linear algorithm for compact box-drawing of trees,* Networks, 42(3), pp. 160-164, 2003.
- Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Rectangular drawings of plane graphs without designated corners*, Computational Geometry: Theory and Applications, 21(3), pp. 121-138, 2002.
- 37. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Box-rectangular drawings of plane graphs*, Journal of Algorithms, 37, pp. 363-398, 2000.
- 38. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *A linear algorithm for bend-optimal orthogonal drawings of triconnected cubic plane graphs*, Journal of Graph Algorithms and Applications, 3(4), pp. 31-62, 1999.
- 39. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Rectangular grid drawings of plane graphs*, Computational Geometry: Theory and Applications, 10(3), pp. 203-220, 1998.
- Shin-ichi Nakano, Md. Saidur Rahman and Takao Nishizeki, A linear-time algorithm for four-partitioning four-connected planar graphs, Information Processing Letters, 62, pp. 315-322, 1997.
- 41. Md. Saidur Rahman and Md. Shamsul Alam, *Token access protocols in multiple bus local computer networks*, Journal of Bangladesh Computer Society, 6(1), pp. 36-44, 1993.
- 42. Md. Saidur Rahman and Md. Shamsul Alam, *Study of explicit and implicit token passing protocols in multiple bus LAN*, Journal of the Institution of Engineers, Bangladesh, 21(4), pp. 87-95, 1993.
- e) Conferences (national and international conferences):
  - i) Proceedings:
  - Shaheena Sultana and Md. Saidur Rahman, Realizability of Graphs as Triangle Cover Contact Graphs, Proc. Of COCOA 2016, Lecture Notes in Computer Science, 10043, Springer, pp. 393-407, 2016.
  - Md. Iqbal Hossain, and Md. Saidur Rahman, A necessary condition and a sufficient condition for pairwise compatibility graphs, Proc. of WALCOM 2016, Springer, Lecture Notes in Computer Science, 9627, pages 107-113, 2016.
  - 3. Md. Iqbal Hossain, Shaheena Sultana, Nazmun Nessa Moon, Tahsina Hashem, Md. Saidur

Rahman: *On triangle cover contact graphs*, Proc. Of WALCOM 2015, Lecture Notes in Computer Science, Springer, pp. 323-328, 2015.

- Md. Iqbal Hossain, and Md. Saidur Rahman, *Monotone grid drawings of planar graphs*, Proceedings of *FAW 2014*, Lecture Notes in Computer Science, Springer, 8497, pp. 105-116, 2014.
- Shaheena Sultana, Md. Saidur Rahman, Arpita Roy, and Suraiya Tairin, *Bar 1-Visibility* Drawings of 1-Planar Graphs., Proceedings of ICAA 2014, Lecture Notes in Computer Science, Springer, 8321, 2014.
- Khaled Mahmud Shahriar and Md. Saidur Rahman, Bichromatic point-set embeddings of trees with fewer bends, Proceedings of WALCOM 2014, Lecture Notes in Computer Science, 8344, Springer, pp. 337-348, 2014.
- Shaheena Sultana, Md. Saidur Rahman, Arpita Roy and Suraiya Tairin, Bar 1-Visibility Drawings of 1-Planar Graphs, Proc. of ICAA 2014, Lecture Notes in Computer Science, 8321, Springer, pp. 62-76, 2014.
- Md. Iqbal Hossain and Md. Saidur Rahman, *Straight-Line Monotone Grid Drawings of Series-Parallel Graphs*, Proc. of COCOON 2013, Lecture Notes in Computer Science, Springer, 7936, pp. 672-679, 2013.
- Stephane Durocher, Debajyoti Mondal, and Md. Saidur Rahman, On Graphs That Are Not PCGs, Proceedings of WALCOM 2013, Lecture Notes in Computer Science, 7748, Springer, pp. 310-321, 2013.
- Md. Manzurul Hasan, Md. Saidur Rahman, and Md. Rezaul Karim, Box-Rectangular Drawings of Planar Graphs. Proceedings of WALCOM 2013, Lecture Notes in Computer Science, 7748, Springer, pp. 334-345, 2013.
- Aftab Hussain, and Md. Saidur Rahman, A new hierarchical clustering technique for restructuring software at the function level. In Proceedings of ISEC 2013, ACM, pp. 45-54, 2013.
- Md. Rezaul Karim, Md. Jawaherul Alam, and Md. Saidur Rahman, On Some Properties of Doughnut Graphs, Proc. of IWOCA 2012, Lecture Notes in Computer Science, 7643, pp. 60– 64, 2012.
- 13. Debajyoti Mondal, Rahnuma Islam Nishat, Md. Saidur Rahman, and Sue Whitesides, *Acyclic Coloring with Few Division Vertices*, Proc. of IWOCA 2012, Lecture Notes in Computer Science, 7643, pp. 86–99, 2012.
- 14. Sammi Abida Salma and Md. Saidur Rahman, *Triangle-Free Outerplanar 3-Graphs are Pairwise Compatibility Graphs*, Proc. of WALCOM 2012, Lecture Notes in Computer Science, 7157, Springer, pp. 112-123, 2012.
- Md. Iqbal Hossain, Debajyoti Mondal, Md. Saidur Rahman and Sammi Abida Salma, *Universal Line-Sets for Drawing Planar 3-Trees*, Proc. of WALCOM 2012, Lecture Notes in Computer Science, 7157, Springer, pp. 136-147, 2012.
- 16. Stephane Durocher, Debajyoti Mondal, Rahnuma Islam Nishat, Md. Saidur Rahman and Sue Whitesides, *Embedding Plane \$3\$-Trees in \$\mathbf{mathbf{R}^2\$ and \$\mathbf{mathbf{R}^3\$, Proc. of GD 2011, Lecture Notes in Computer Science, 7034, Springer, pp. 39-51, 2011.*
- 17. Debajyoti Mondal, Rahnuma Islam Nishat, Sue Whitesides and Md. Saidur Rahman, *Acyclic Colorings of Graph Subdivisions*, Proc. of IWOCA 2011, Lecture Notes in Computer Science, 7056, Springer, pp. 247-260, 2011.

- Rahnuma Islam Nishat, Debajyoti Mondal and Md. Saidur Rahman. Point-Set Embeddings of Plane 3-Trees, Proceedings of Graph Drawing 2010, Lecture Notes in Computer Science, 6502, Springer, pp. 317--328, 2011.
- Debajyoti Mondal, Jawaherul Alam and Md. Saidur Rahman. *Minimum-layer drawings of trees*, Proc. of WALCOM 2011, Lecture Notes in Computer Science, 6552, Springer, pp. 221-232, 2011.
- Tonmoy Guha Roy, Sourabh Aryabhatta, Md. Mohsin Uddin and Md. Saidur Rahman. On graceful labelings of trees, Proc. WALCOM 2011, Lecture Notes in Computer Science, 6552, Springer, pp. 214-220, 2011.
- 21. Tanveer Awal and Md. Saidur Rahman, A linear algorithms for resource four-partitioning four-connected planar Graphs, ICECE 2010, pp. 526 529, 2010.
- 22. Md. Emran Chowdhury, Md. Jawaherul Alam and Md. Saidur Rahman, *Fewer bends point-set embedding with mapping*, ICECE 2010, pp. 538 541, 2010.
- 23. Md. Shamsuzzoha Bayzid, Md. Maksudul Alam, and Md. Saidur Rahman, *A heuristic algorithm for minimum conflict individual haplotyping*, International Conference on Biomedical Engineering and Informatics (BMEI), Vol. 5, pp. 2145 2149, 2010.
- 24. Debajyoti Mondal, Rahnuma Islam Nishat, Md. Saidur Rahman, and Muhammad Jawaherul Alam, *Minimum-area drawings of plane 3-trees*, Proc. of 22nd Canadian Conference on Computational Geometry (CCCG 2010), pp. 191-194, 2010.
- 25. Sudip Biswas, Debajyoti Mondal, Rahnuma Islam Nishat and Md. Saidur Rahman, *Minimum-segment convex drawings of 3-connected cubic plane graphs*, Proc. of 16th Annual International Computing and Combinatorics Conference (COCOON 2010), Lecture Notes in Computer Science, 6196 Springer, pp. 182-191, 2010.
- Muhammad Nur Yanhaona, Md. Shamsuzzoha Bayzid and Md. Saidur Rahman, *Discovering pairwise compatibility graphs*, Proc. of 16th Annual International Computing and Combinatorics Conference (COCOON 2010), Lecture Notes in Computer Science, 6196 Springer, pp. 399-408, 2010.
- 27. Rahnuma Islam Nishat, Debajyoti Mondal, and Md. Saidur Rahman, *Visibility drawings of plane 3-trees*, Proc. of 13th Japan-Korea Joint Workshop on Algorithms and Computation (WAAC 2010), pp. 2010.
- Mohammad Tanvir Parvez, Md. Saidur Rahman and <u>Shin-Ichi Nakano</u>, *Generating all triangulations of plane graphs*, Proc. of <u>WALCOM 2009</u>, Lecture Notes in Computer Science, 5431, Springer, pp. 151-164, 2009.
- Md. Rezaul Karim, Md. Jawaherul Alam and Md. Saidur Rahman, Straight-line grid drawings of label-constrained outerplanar graphs with O(nlogn) area,. Proc. of WALCOM 2009, Lecture Notes in Computer Science, 5431, Springer, pp. 310-321, 2009.
- Abdullah Al Mueen, Md. Shamsuzzoha Bayzid, Md. Maksudul Alam, Md. Saidur Rahman, A Heuristic Algorithm for Individual Haplotyping with Minimum Error Correction, Proc. of the 2008 International Conference on BioMedical Engineering and Informatics (BMEI 2008), 1, pp. 792-796, 2008.
- Md. Wasi-ur Rahman, Nusrat Sharmin Islam, and Md. Saidur Rahman, A Linear Algorithm for Floorplan Compaction, Proc. of the 5th International Conference on Electrical and Computer Engineering (ICECE 2008), pp. 964-969, 2008.
- 32. Md. Jawaherul Alam, Md. Abul Hassan Samee, Md. Mashfiqui Rabbi and Md. Saidur

- Md. Abul Hassan Samee, Mohammad Tanvir Irfan and Md. Saidur Rahman: Computing beta -drawings of 2-outerplane graphs in linear time, Proc. of WALCOM 2008, Lecture Notes in Computer Science, 4921, Springer, pp. 81-87, 2008.
- Muhammad Nur Yanhaona, K. S. M. Tozammel Hossain and Md. Saidur Rahman, *Pairwise compatibility graphs*, Proc. of WALCOM 2008, Lecture Notes in Computer Science, 4921, pp. 222-233, Springer, 2008.
- Md. Rezaul Karim and Md. Saidur Rahman, Four-connected spanning subgraphs of doughnut graphs, Proc. of WALCOM 2008, Lecture Notes in Computer Science, 4921, Springer, pp. 132-143, 2008.
- 36. Md. Rezaul Karim and Md. Saidur Rahman, *Straight-line grid drawings of planar graphs with linear area,* Proc. of Asia-Pacific Symposium on vusualisation (APVIS 2007), pp. 109-112, IEEE, 2007.
- 37. Md. Saidur Rahman, *Current research on planar graphs*, Proc. of International Conference on Information and Communication Technology (ICICT 2007), pp. 148-149, 2007.
- Muhammad Abdullah Adnan and Md. Saidur Rahman, *Efficient generation of evolutionary* trees, Proc. of International Conference on Information and Communication Technology (ICICT 2007), pp. 32-35, 2007.
- 39. Md. Abul Hasan Samee and Md. Saidur Rahman, *Visualization of complete graphs, trees and series-parallel graphs for practical applications,* Proc. of International Conference on Information and Communication Technology (ICICT 2007), pp. 22-26, 2007.
- 40. Md. Abul Hassan Samee and Md. Saidur Rahman, Upward Ppanar drawings of seriesparallel digraphs with maximum degree three, Proc. Workshop on Algorithms and Computation (WALCOM 2007), pp. 28-45, 2007.
- 41. Muhammad Abdullah Adnan and Md. Saidur Rahman, Distribution of distinguishable objects to bins: generating all distributions, Proc. of Workshop on Algorithms and Computation (WALCOM 2007), pp. 136-150, 2007.
- 42. Mohammad Tanvir Irfan and Md. Saidur Rahman, *Computing \$beta\$-drawings of 2-outerplane graphs*, Proc. Workshop on Algorithms and Computation (WALCOM 2007), pp. 46-61, 2007.
- 43. Md. Mostofa Ali Patwary and Md. Saidur Rahman, *Minimum face-spanning subgraphs of plane graphs*, Proc. Workshop on Algorithms and Computation (WALCOM 2007), pp. 62-75, 2007.
- 44. Zalia Shams, Ahahina Ferdous, Kazi Zakia Sultana and Md. Saidur Rahman, *On resource bipartitioning problem*, Proc. of 4<sup>th</sup> International Conference on Electrical and Computer Engineering (ICECE 2006), pp. 308-311, 2006.
- Md. Saidur Rahman, Noritsugu Egi and Takao Nishizeki, *No-bend orthogonal drawings of* series-parallel graphs, Proc. of Graph Drawing 2005, Lecture Notes in Computer Science, 3843, Springer, pp. 409-420, 2005.
- 46. Md. Saidur Rahman, Kazuyuki Miura and Takao Nishizeki, Octagonal drawings of plane

graphs with prescribed face areas, Proc. of 30<sup>th</sup> Workshop on Graph-Theoretic Concepts in Computer Science (WG 2004), Lecture Notes in Computer Science, 3353, Springer, pp. 320-331, 2004.

- 47. Md. Saidur Rahman, Noritsugu Egi and Takao Nishizeki, *No-bend orthogonal drawings of subdivisions of planar triconnected cubic graphs*, Proc. of Graph Drawing 2003, Lecture Notes in Computer Science, 2912, Springer, pp. 387-392, 2004.
- Md. Saidur Rahman, Noritsugu Egi and Takao Nishizeki, Algorithm for no-bend orthogonal drawings of subdivisions of planar triconnected cubic graphs, Proc. of 7th Japan-Korea workshop on Algorithms and Computation, pp.252-266, 2003.
- 49. Md. Saidur Rahman, Kazuyuki Miura and Takao Nishizeki, *A linear algorithm for prescribed-area octagonal drawings of plane graphs*, Proc. of FIT 2003, Information Technology Letters, 2, pp. 15-16, 2003.
- 50. Ragib Hasan, Meetesh Barua, Pradipta Prometheus Mitra, Jalaluddin Mahmud and Md. Saidur Rahman, *Design of a graph drawing and visualization system*, Proc. of 5<sup>th</sup> International Conference on Computer and Information Technology (ICCIT 2002), pp. 41-46, 2002.
- Md. Saidur Rahman, Takao Nishizeki and Shubhashis Ghosh, *Rectangular drawings of planar graphs*, Proc. of Graph Drawing 2002 (GD 2002), Lecture Notes in Computer Science, 2528, Springer, pp. 244-255, 2002.
- 52. Md. Saidur Rahman and Takao Nishizeki, *Bend-minimum orthogonal drawings of plane 3-graphs*, Proc. of 28<sup>th</sup> Workshop on Graph-Theoretic Concepts in Computer Science (WG 2002), Lecture Notes in Computer Science, 2573, Springer, pp. 367-378, 2002.
- Masud Hasan, Md. Saidur Rahman and Takao Nishizeki, A linear algorithm for compact boxdrawings of trees, Proc. of 14th Canadian Conference on Computational Geometry (CCCG 2002), pp. 154-157, 2002.
- 54. Md. Saidur Rahman, Takao Nishizeki and Shubhashis Ghosh, *A linear algorithm for rectangular drawings of planar graphs*, Proc. of FIT 2002, Information Technology Letters, 1, pp. 19-20, 2002.
- 55. Takao Nishizeki, Kazuyuki Miura and Md. Saidur Rahman, *Algorithms for drawing plane graphs*, Proc. of 3rd Int. Conf. Parallel and Distributed Computing, Applications and Technologies (PDCAT 2002), pp. 143-150, 2002
- Md. Saidur Rahman, Mahmuda Naznin and Takao Nishizeki, Orthogonal drawings of plane graphs without bends, Proc. of Graph Drawing 2001 (GD 2001), Lecture Notes in Computer Science, 2265, Springer, pp. 392-406, 2002.
- 57. Suman Saha, A. K. M. Azad and Md. Saidur Rahman, A linear algorithm for automated VLSI

*floorplanning and routing*, Proc. of 4<sup>th</sup> International Conference on Computer and Information Technology (ICCIT 2001), pp.165-170, 2001.

- 58. Md. Saidur Rahman, *Rectangular drawings of plane 4-graphs*, Proc. of International Conference on Electrical and Computer Engineering (ICECE 2001), pp. 284-286, 2001.
- 59. Masud Hasan and Md. Saidur Rahman, *A linear algorithm for finding visibility graph of trees*, Proc. of International Conference on Electrical and Computer Engineering (ICECE 2001), pp. 287-289, 2001.
- 60. Md. Saidur Rahman, Subhashis Ghosh and Takao Nishizeki, *Rectangular drawings of subdivisions of 3-connected planar graphs*, Proc. of 3<sup>rd</sup> International Conference on Computer and Information Technology (ICCIT 2000), pp.158-162, 2001.
- 61. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, Rectangular drawings of plane

graphs without designated corners, Proc. of 6<sup>th</sup> Annual International Conference on Computing and Combinatorics (COCOON 2000), Lecture Notes in Computer Science, 1858, Springer, pp. 85-94, 2000.

- 62. Md. Saidur Rahman, Mahmuda Naznin, Shin-ichi Nakano and Takao Nishizeki, *Orthogonal drawings of biconnected plane graphs without bends*, Proc. of 2<sup>nd</sup> International Conference on Computer and Information Technology (ICCIT 1999), pp.199-203, 1999.
- 63. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Box-rectangular drawings of plane graphs*, Proc. of 25<sup>th</sup> Workshop on Graph-Theoretic Concepts in Computer Science (WG 1999), Lecture Notes in Computer Science, 1665, Springer, pp. 250-261, 1999.
- 64. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Box-rectangular drawings of plane graphs with designated four corners*, Proc. of 1<sup>st</sup> International Conference on Computer and Information Technology (ICCIT 1998), pp.37-41, 1998.
- 65. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, A linear algorithm for optimal orthogonal drawings of triconnected cubic plane graphs, Proc. of Graph Drawing 1997 (GD 1997), Lecture Notes in Computer Science, 1353, pp. 99-110, 1998.
- 66. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *A linear-time algorithm for orthogonal drawings of triconnected cubic plane graphs with the minimum number of bends*, Proc. of Japan-Korea joint workshop on Algorithms and Computation, pp.24-31, 1997.
- 67. Shin-ichi Nakano, Md. Saidur Rahman and Takao Nishizeki, *A linear-time algorithm for four-partitioning four-connected planar graphs*, Proc. of Graph Drawing 1996 (GD 1996), Lecture Notes in Computer Science, 1190, pp. 334-344, 1997.
- 68. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Rectangular grid drawings of plane graphs*, Proc. of 2<sup>nd</sup> Annual International Conference on Computing and Combinatorics (COCOON 1996), Lecture Notes in Computer Science, 1090, pp. 92-105, 1996.

#### ii) Presentations:

- 1. Md. Saidur Rahman, Pairwise Compatibility Graphs, Tohoku University, Japan, February, 2014 (Invited Talk).
- Md. Saidur Rahman, Pairwise Compatibility Graphs, Kyoto University, Japan, January, 2014 (Invited Talk).
- 3. Md. Saidur Rahman, Pairwise Compatibility Graphs, University of Sydney, Australia, March, 2013 (Invited Talk).
- 4. Stephane Durocher, Debajyoti Mondal, and Md. Saidur Rahman, *On Graphs That Are Not PCGs*, Proceedings of WALCOM 2013, IIT, Kharagpur, India, February, 2013.
- 5. Debajyoti Mondal, Rahnuma Islam Nishat, Md. Saidur Rahman, and Sue Whitesides, *Acyclic Coloring with Few Division Vertices*, IWOCA 2012, Tamil Nadu, India, July, 2012.
- 6. Md. Saidur Rahman, Pairwise Compatibility Graphs, ISI Kolkata, India, February, 2011.
- 7. Debajyoti Mondal, Jawaherul Alam and Md. Saidur Rahman. *Minimum-layer drawings of trees*, WALCOM 2011, IIT, Delhi, India, February, 2011.
- 8. Rahnuma Islam Nishat, Debajyoti Mondal and Md. Saidur Rahman, *Point-Set Embeddings of Plane 3-Trees*, Graph Drawing 2010, Konstanz, Germany, September, 2010.
- 9. Md. Saidur Rahman, *Drawing planar graphs with small area*, KAIST, Korea, May 2010 (Invited Talk).

- Rahnuma Islam Nishat, Debajyoti Mondal and Md. Saidur Rahman, *Point-Set Embeddings of Plane 3-Trees*, 3rd Annual Meeting of the Asian Association for Algorithms and Computation, POSTECH, Korea, May, 2010.
- Muhammad Nur Yanhaona, Md. Shamsuzzoha Bayzid and Md. Saidur Rahman, Not all graphs are pairwise compatibility graphs, 3rd Annual Meeting of the Asian Association for Algorithms and Computation, POSTECH, Korea, May, 2010.
- Mohammad Tanvir Parvez, Md. Saidur Rahman and <u>Shin-Ichi Nakano</u>, Generating All Triangulations of Plane Graphs, Workshop on Algorithms and Computation (<u>WALCOM</u> <u>2009</u>), Kolkata, India, February, 2009.
- 13. Md. Saidur Rahman, *Doughnut graphs ant their spanning subgraphs (invited talk)*, The International Workshop on Algorithms and Graphs (IWAAG 2007), Sendai, Japan, December 2007.
- 14. Md. Saidur Rahman, *Current research on planar graphs (invited talk)*, ICICT 2007, Dhaka, Bangladesh, March 2007.
- 15. Md. Saidur Rahman, Kazuyuki Miura and Takao Nishizeki, Octagonal drawings of plane graphs with prescribed face areas, WG 2004, Bad Honnef, Germany, June 2004.
- 16. Md. Saidur Rahman, Noritsugu Egi and Takao Nishizeki, *No-bend Orthogonal drawings of subdivisions of planar triconnected cubic graphs*, GD 2003, Perugia, Italy, September 2003.
- 17. Md. Saidur Rahman, Kazuyuki Miura and Takao Nishizeki, *A linear algorithm for prescribed-area octagonal drawings of plane graphs*, FIT 2003, Sapporo, Japan, September 2003.
- 18. Md. Saidur Rahman, Takao Nishizeki and Shubhashis Ghosh, *A linear algorithm for rectangular drawings of planar graphs*, FIT 2002, Tokyo Institute of Technology, Japan, September 2002.
- 19. Md. Saidur Rahman, Takao Nishizeki and Shubhashis Ghosh, *Rectangular drawings of planar graphs*, Workshop on Computation, Institute of Electrical and Information Engineers, Tokyo Institute of Technology, Japan, August 2002.
- Md. Saidur Rahman, Takao Nishizeki and Shubhashis Ghosh, *Rectangular drawings of planar graphs*, Graph Drawing 2002, Irvine, California, August 2002.
- 21. Md. Saidur Rahman and Takao Nishizeki, Bend-minimum orthogonal drawings of plane 3-

graphs, 27<sup>th</sup> Workshop on Graph-Theoretic Concepts in Computer Science (WG'02), Cesky Krumlov, Czech Republic, June 2002.

- 22. Md. Saidur Rahman and Takao Nishizeki, *Bend-optimal orthogonal drawings of plane 3-graphs*, Workshop on Computation, Institute of Electrical and Information Engineers, Nihon University, Tokyo, Japan, March 2002.
- 23. Md. Saidur Rahman, Mahmuda Naznin and Takao Nishizeki, *Orthogonal drawings of plane* graphs without bends, Graph Drawing 2001, Vienna, September 2001.
- 24. Md. Saidur Rahman, *Rectangular drawings of plane 4-graphs*, International Conference on Electrical and Computer Engineering (ICECE'2001), Dhaka, Bangladesh, January 2001.
- 25. Md. Saidur Rahman, *Rectangular drawings of plane graphs (talk)*, Dept. of Computer Science, Gunma University, Japan, December 2000.
- 26. Md. Saidur Rahman, *Rectangular Drawings of plane graphs (talk)*, Graduate School of Information Sciences, Tohoku University, Japan, November 2000.
- 27. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Rectangular drawings of plane* graphs without designated corners, 6<sup>th</sup> Annual International Conference on Computing and

Combinatorics (COCOON 2000), Sydney, Australia, July 2000.

- 28. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Box-rectangular drawings of plane graphs*, 25<sup>th</sup> Workshop on Graph-Theoretic Concepts in Computer Science (WG'99), Ascona, Switzerland, June 1999.
- 29. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, Box-rectangular drawings of

plane graphs with designated four corners, 1<sup>st</sup> International Conference on Computer and Information Technology (ICCIT 1998), Dhaka, Bangladesh, December, 1998.

- Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Box-rectangular drawings of plane graphs*, Workshop on Computations (COMP 98-38), Institute of Electrical and Information Engineers, Sendai, Japan, October 1998.
- 31. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Rectangular grid drawings of plane graphs*, COCOON'96, Hong Kong, June 1996.
- Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, *Rectangular grid drawings of plane graphs*, Annual Conference of Institute of Electrical and Information Engineers, Japan, Tokyo, March 1996.
- 33. Md. Saidur Rahman, Shin-ichi Nakano and Takao Nishizeki, Rectangular grid drawings of

*plane graphs*, 48<sup>th</sup> Workshop on Algorithms, Information Processing Society of Japan, Kobe, Japan, November 1995.

#### f) Theses

- 1. Md. Saidur Rahman, *Efficient Algorithms for Drawing Planar Graphs*, Ph. D. Thesis, Tohoku University, 1999.
- 2. Md. Saidur Rahman, A Study on Rectangular Drawing Algorithms for Planar Graphs, M.Sc. Thesis, Tohoku University, 1996.
- 3. Md. Saidur Rahman, Study of Token Passing Protocols for Multiple Bus Local Area Networks by Simulation, M. Sc. Engg. Thesis, BUET, 1992.
- Md. Saidur Rahman, Computer Aided Evaluation of Voltage Transients in Power System Analysis, B. Sc. Engg. Thesis, BUET, 1989.

#### g) H-index and Total Citation Number

H-index: 15

Total Citation Number: 964

The *h*-index is an index that attempts to measure both the productivity and impact of the published work of a <u>scientist</u> or scholar. The index is based on the set of the scientist's most cited papers and the number of citations that they have received in other publications. A scientist has index h if h of his/her N<sub>p</sub> papers have at least h citations each, and the other  $(N_p \ h)$  papers have no more than h citations each. In other words, a scholar with an index of h has published h papers each of which has

been cited in other papers at least h times.