

## **Dr. Lutfa Akter**

Professor, Department of Electrical and Electronic Engineering,  
Bangladesh University of Engineering and Technology, Dhaka, Bangladesh  
Tel: 88-01776197537 (cell), E-mail: [lutfaaakter@eee.buet.ac.bd](mailto:lutfaaakter@eee.buet.ac.bd), [lutfa.akter02@gmail.com](mailto:lutfa.akter02@gmail.com)

### **CAREER OBJECTIVE**

Be a dedicated academic (teaching and research) personality in **Communication/Signal Processing** area

### **CURRENT RESEARCH INTEREST**

Resource allocation in cognitive radio networks  
Resource allocation in wireless communication networks  
Wireless sensor deployment  
Localization of video endoscopic capsule  
THz Communication Systems  
Cell Free Massive MIMO  
Aerial Communications  
Radar and Satellite Communications  
Internet of Things  
Biomedical Signal Processing

### **EDUCATION**

#### **Ph. D. in Electrical Engineering**

**Graduation: May 2010**

Kansas State University, Manhattan, Kansas, USA

**Dissertation:** Modeling, forecasting and resource allocation in cognitive radio networks

#### **M. S. in Electrical & Electronic Engineering**

Graduation: February 2004

Bangladesh University of Engineering and Technology, Bangladesh

**Thesis:** Low Distortion Speech Enhancement in the DCT Domain using Optimal Estimate of the *a Priori* SNR

### **MAJOR GRADUATE COURSE**

Biomedical Signal Processing, Advanced Digital Signal Processing, Advanced Telecommunication Engineering, Optical Fibre Communication, Communication Systems I, Communication Systems II, Introduction to Wireless Communications, Signal Estimation and Detection Theory, Information Theory, Advanced Topics in Communications, Stochastic Processes

#### **B. S. in Electrical & Electronic Engineering**

Graduation: March 2002

Bangladesh University of Engineering and Technology, Bangladesh

**Thesis:** Modal Analysis of Shielded Microstrip Lines by Spectral Domain Method

### **PROFESSIONAL EXPERIENCE**

#### **Professor**

**May 2017 to date**

Department of Electrical and Electronic Engineering  
Bangladesh University of Engineering and Technology  
Dhaka, Bangladesh

#### **Associate Professor**

**July 2012 to May 2017**

Department of Electrical and Electronic Engineering  
Bangladesh University of Engineering and Technology  
Dhaka, Bangladesh

#### **Assistant Professor**

**September 2004 to July 2012**

Department of Electrical and Electronic Engineering  
Bangladesh University of Engineering and Technology  
Dhaka, Bangladesh

**Graduate Research Assistant**

Department of Electrical and Computer Engineering  
Kansas State University, Manhattan, Kansas, USA

**August 2006 to May 2010**

**Lecturer**

Department of Electrical and Electronic Engineering  
Bangladesh University of Engineering and Technology  
Dhaka, Bangladesh

**May 2002 to September 2004**

**Courses taught: Undergraduate theory classes** on Introduction to Electrical Engineering, Engineering Electromagnetics, Continuous time Signals and Systems, Control Systems, Digital Communication, Electrical Circuits I, Electrical Circuits II, Communication System I, Communication System II 70 students in each theory class, **Undergraduate lab classes** on Communication System, Industrial Electronics, Electrical Machines, Electrical Design and Drafting, Numerical Methods, Electronics, Introduction to Electrical Engineering, 35 students in each lab class. **Graduate theory classes** on Signal Detection and Estimation Theory, Information and Coding Theory.

**Undergraduate and Graduate Thesis Supervision**

**PUBLICATION**

**Book Chapter:**

[BC1] **Lutfu Akter**, Bala Natarajan and Caterina Scoglio, "Spectrum Usage Modeling and Forecasting in Cognitive Radio Networks" as a chapter in "Cognitive Radio Networks" by *Auerbach Publications*, New York, December, 2008.

**Journal:**

[J17] U. Hany, N. M. Hye and **L. Akter**, "Wireless Capsule Endoscope Localization using LSTM Network," in *IEEE Sensors Letters*, November 2023.

[J16] U. Hany, N. M. Hye and **L. Akter**, "Path Loss Based Wireless Capsule Endoscope Localization Using Machine Learning Regression," in *IEEE Access*, vol. 11, pp. 124643-124659, November 2023.

[J15] Umma Hany, **Lutfu Akter**, "Accuracy of UWB Path Loss-Based Localization of Wireless Capsule Endoscopy", *Journal of Healthcare Engineering*, vol. 2023, Article ID 3156013, 13 pages, June 2023.

[J14] N. M. Hye, U. Hany, S. Chakravarty, **L. Akter** and I. Ahmed, "Artificial Intelligence for sEMG-Based Muscular Movement Recognition for Hand Prosthesis," in *IEEE Access*, vol. 11, pp. 38850-38863, April 2023.

[J13] **Lutfu Akter** and Normin Nahar, "Specific Quality of Service Constrained Optimal Allocation of Transmit Power in Uplink Cognitive OFDMA System," *International Journal of Computer and Communication Engineering*, vol. 9, no. 3, July 2020.

[J12] Umma Hany and **Lutfu Akter**, "Non-parametric Approach using ML Estimated Path Loss based WCL for Video Capsule Endoscope Localization," *IEEE Sensors Journal*, vol. 18, no. 11, pp. 4761-4769, May, 2018.

[J11] Umma Hany and **Lutfu Akter**, "Local Parametric Approach of Wireless Capsule Endoscope Localization Using Randomly Scattered Path Loss Based WCL," *Wireless Communications and Mobile Computing*, Wiley-Hindawi, December 2017.

[J10] Umma Hany and **Lutfu Akter**, "Non-parametric Method of Path Loss Estimation for Endoscopic Capsule Localization," *International Journal of Wireless Information Networks*, Springer, December 2017.

- [J9] U. Hany and **L. Akter**, "Non-parametric Approach of Video Capsule Endoscope Localization using Sub-optimal Method of Position Bounded CWCL," *IEEE Sensors Journal*, vol. 17, no. 20, pp. 6806-6815, October 15, 2017.
- [J8] **Lutfu Akter**, Neelanjana Subin Ferdous and Zobaer Ahmed, "Transmit Power and Bits/Channel Use Adaption in Competitive Cognitive Radio Networks," vol. 24, pp. 123-130, *Physical Communication, Elsevier*, July 11, 2017.
- [J7] U. Hany, **L. Akter** and M. F. Hossain, "Degree based WCL for Video Endoscopic Capsule Localization," *IEEE Sensors Journal*, vol. 17, no. 9, pp. 2904-2916, May 1, 2017.
- [J6] Ahmad A. Ababneh, Fadi R. Zghoul and **Lutfu Akter**, "Quantizer Design for RSSI-based Target Localization in Sensor Networks," *Ad Hoc and Sensor Wireless Networks, Old City Publishing*, vol. 35, no. 3-4, pp. 319-340, 2017.
- [J5] **Lutfu Akter** and Bala Natarajan, "Impact of Fairness Models on Resource Allocation in a QoS Constrained Competitive Cognitive Radio Network," *Journal of Communications Engineering and Network, Bowen Publishing*, vol.2, no.1, pp.34-49, Jan 2014.
- [J4] **Lutfu Akter** and Bala Natarajan, "Distributed Approach for Power and Rate Allocation to Secondary Users in Cognitive Radio Networks," *IEEE Transactions on Vehicular Technology*, vol.60, no.4, pp.1526-1538, May 2011.
- [J3] **Lutfu Akter** and Bala Natarajan, "A Two-Stage Power and Rate Allocation Strategy for Secondary Users in Cognitive Radio Networks," *Journal of Communication*, December 2009.
- [J2] **Lutfu Akter** and Bala Natarajan, "QoS Constrained Resource allocation to Secondary Users in Cognitive Radio Networks," *Computer Communications, Elsevier*, June 2009.
- [J1] M. Shah Alam and **Lutfu Akter**, "On Complex Modal Solutions in Lossless Planar Transmission Lines," *Journal of Electrical Engineering, IEB, Bangladesh*, Vol. EE 29, No. 2, December 2001 & EE 30, No. 1, June 2002.

#### Conference:

- [C28] N. S. Fedous, M. Z. Hassan, I. Ahmed, and **L. Akter**, "Resource Management for Reduced Capability New Radio Devices in Beyond 5G Networks: Opportunities and Research Road Map", *IEEE CIoT*, Oct. 2024.
- [C27] S. Tanzina, I. Ahmed, M. S. Alam, **L. Akter**, K. Hasan, and S. Tasnim, "Channel Prediction for Cell-Free Massive MIMO Communication Systems Supporting Aerial Integrated Network", *IEEE VTC Fall*, Sep. 2024.
- [C26] N. S. Ferdous, M. S. Alam, M. S. Islam, **L. Akter**, K. Hasan and I. Ahmed, "On the Performance of Intelligent Reflecting Surface Aided Industrial Internet of Things Networks," *IEEE International Conference on Telecommunications and Photonics (ICTP)*, Dhaka, Bangladesh, December 2023.
- [C25] N. S. Ferdous, I. Ahmed, U. Hany, **L. Akter**, R. Annavajjala and C. Pu, "Low Complexity Resource Allocation for Multiuser Uplink Communication Systems," *45th International Conference on Telecommunications and Signal Processing (TSP)*, Czechoslovakia-Virtual Conference, July 2022.
- [C24] Dibyangana Kar, Niranjan Chandra Roy and **Lutfu Akter**, "Adaptation of Transmit Power and Bits/Subchannel in QoS Constrained Downlink Cognitive OFDMA Networks," *International Conference on Electrical and Computer Engineering (ICECE)*, Dhaka, Bangladesh, 2018.

- [C23] Niranjan Chandra Roy, Dibyangana Kar and **Lutfu Akter**, "Transmit Power and Bits Adaptation in QoS Constrained Multiple User Uplink Cognitive OFDMA Networks," *International Conference on Electrical and Computer Engineering (ICECE)*, Dhaka, Bangladesh, 2018.
- [C22] Md. Didarul Islam and **Lutfu Akter**, "Specific Quality of Service Constrained Optimal Allocation of Transmit Power and Bits in NOMA Systems," *International Conference on Electrical and Computer Engineering (ICECE)*, Dhaka, Bangladesh, 2018.
- [C21] Umma Hany and **Lutfu Akter**, "Local Polynomial Regression Based Path Loss Estimation for Weighted Centroid Localization of Endoscopic Capsule," *International Conference on Control, Electronics, Renewable Energy, and Communications 2017 (ICCEREC 2017)*, Indonesia.
- [C20] Umma Hany and **Lutfu Akter**, "Accuracy of Endoscopic Capsule Localization using Position Bounds on Smoothed Path Loss based WCL," *2017 IEEE International Conference on Signal and Image Processing Applications (IEEE ICSIPA 2017)*, Malaysia.
- [C19] Umma Hany and **Lutfu Akter**, "Performance of Distance based and Path Loss based Weighted Centroid Localization Algorithms for Video Capsule Endoscope," *2017 IEEE International Conference on Signal and Image Processing Applications (IEEE ICSIPA 2017)*, Malaysia.
- [C18] Soumya Kanti Das and **Lutfu Akter**, "Analysis of Statistical Features for Face Recognition based on Holistic Approach", *International Conference on Electrical, Computer and Communication Engineering (ECCE)*, Cox's Bazar, Bangladesh, 2017.
- [C17] U. Hany, **L. Akter** and M. F. Hossain, "Moving averaging method of RSSI based distance estimation for wireless capsule localization," *International Conference on Medical Engineering, Health Informatics and Technology (MediTec)*, Dhaka, Bangladesh, 2016.
- [C16] Mijanur Rahaman Palash, Zobaer Ahmed, Md Ibrahim Khalil and **Lutfu Akter**, "0-3 GHz Spectrum Occupancy Measurement in Bangladesh for Cognitive Radio Purpose," *IEEE International Conference on Telecommunications and Photonics (IEEE ICTP)*, Dhaka, Bangladesh, 2015.
- [C15] Zobaer Ahmed, Asif Zaman and **Lutfu Akter**, "Parametric Analysis of Pickett Potter Horn Antenna," *IEEE International Conference on Telecommunications and Photonics (IEEE ICTP)*, Dhaka, Bangladesh, 2015.
- [C14] Pritom Mozumdar, Taynan Sabri Helal, Ahmad Ababnah and **Lutfu Akter**, "Heterogeneous Sensor Deployment Strategy based on Optimal Control Theory," *International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT)*, Dhaka, Bangladesh, 2015.
- [C13] Umma Hany and **Lutfu Akter**, "Speeded-Up Robust Feature Extraction and Matching for Fingerprint Recognition," *International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT)*, Dhaka, Bangladesh, 2015.
- [C12] Umma Hany and **Lutfu Akter**, "Wireless Sensor Network for information based Domestic Power Management," *International Conference on Computer and Information Technology (ICCIT)*, Dhaka, Bangladesh, 2014.
- [C11] Taynan Sabri Helal, Pritom Mozumdar and **Lutfu Akter**, "Evaluating the Performance of Optimal Control based Sensor Deployment Algorithms for Realistic Terrain Model," *International Conference on Electrical and Computer Engineering (ICECE)*, Dhaka, Bangladesh, 2014.
- [C10] S. M. Azharul Karim, Soumik Mohiyan and **Lutfu Akter**, "Allocation of Power and Modulation Order (Rate) to Secondary Users in Competitive Cognitive Radio Networks," *International Conference on Informatics, Electronics and Vision (ICIEV)*, Dhaka, Bangladesh, 2014.

[C9] **Lutfu Akter** and Bala Natarajan, "Game Theory based Distributed Approach for Power and Rate Allocation to Secondary Users in Cognitive Radio Networks," *International Conference on Informatics, Electronics and Vision (ICIEV)*, Dhaka, Bangladesh, 2013.

[C8] Mehedi Hasan and **Lutfu Akter**, "A Novel Hybrid Structure of Metamaterial," *International Conference on Electrical and Computer Engineering (ICECE)*, Dhaka, Bangladesh, 2012.

[C7] Mehedi Hasan, M. R. C. Mahdy, Gazi M. Hasan and **Lutfu Akter**, "A novel Miniatured Triple-band Antenna," *International Conference on Electrical and Computer Engineering (ICECE)*, Dhaka, Bangladesh, 2012.

[C6] S. M. Azharul Karim, A. S. M. Shahriar Haque and **Lutfu Akter**, "Power and Rate Allocation to Secondary Users in Competitive Cognitive Radio Networks," *International Conference on Electrical and Computer Engineering (ICECE)*, Dhaka, Bangladesh, 2012.

[C5] **Lutfu Akter** and Bala Natarajan, "Modeling Fairness in Resource Allocation for Secondary Users in a Competitive Cognitive Radio Network," *Wireless Telecommunication Symposium (WTS)*, Florida, USA, 2010.

[C4] **Lutfu Akter** and Bala Natarajan, "Modeling and Forecasting Secondary User Activity Considering Bulk Arrival and Bulk Departure Traffic Model," *IEEE Vehicular Technology Conference (VTC)*, Alaska, USA, Fall 2009.

[C3] **Lutfu Akter**, Bala Natarajan and Caterina Scoglio, "Modeling and Forecasting Secondary User Activity in Cognitive Radio Networks," *International Conference on Computer, Communications and Networks (ICCCN)*, Virgin Islands, USA, 2008.

[C2] **Lutfu Akter** and Md. Kamrul Hasan, "Crosscorrelation compensated Wiener filter for speech enhancement," *IEEE International Conference on Acoustics, Speech and Signal Processing (IEEE ICASSP)*, Toulouse, France, 2006.

[C1] Md. Kamrul Hasan and **Lutfu Akter**, "Quality improvement of enhanced speech in DCT domain using modified a priori SNR," *IEEE Symposium on Signal Processing and Information Technology (ISSPIT)*, Darmstadt, Germany, 2003.

#### **MEMBERSHIP:**

- Senior Member, Institute of Electrical and Electronic Engineers (IEEE).
- Member, Communication Society, IEEE.
- Member, Women in Engineering Affinity Group, IEEE.
- Fellow, The Institution of Engineers, Bangladesh (IEB).

#### **PROFESSIONAL AWARDS:**

- Research Assistantship, Department of Electrical and Computer Engineering, Kansas State University, Manhattan, Kansas, United States of America (August 2006- May 2010).
- Board Scholarship (general grade) during period 1997-2002 for result of higher secondary school examination.
- University Merit Scholarship during period 1997-2002 for result of undergraduate study.
- DEAN'S LISTs Scholarship during period 1997-2002 for academic excellence in undergraduate study.
- Junior Scholarship (general Grade) during period 1991-1992 for result of eighth grade examination.

#### **PROFESSIONAL WORK AT NATIONAL AND INTERNATIONAL LEVELS:**

- Organizing Secretary, ICECE 2024.
- Treasurer, ICECE 2022.

- Treasurer, IEEE ICTP, Dhaka, Bangladesh, 2015, 2017, 2019, 2021, 2023.
- Member, Organizing Committee, International Conference on Electrical and Computer Engineering (ICECE), Dhaka, Bangladesh, 2014, 2016, 2018, 2020, 2022, 2024.
- Member, Technical Committee, International Conference on Electrical and Computer Engineering (ICECE), Dhaka, Bangladesh, 2012.
- Secretary, IEEE Communication Society, Bangladesh Chapter, 2023, 2024.
- Treasurer, IEEE Communication Society, Bangladesh Chapter, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022.
- Vice-Chair, IEEE Communication Society, Bangladesh Chapter, 2012.
- Membership Development Coordinator, IEEE Communication Society, Bangladesh Chapter, 2011.
- Reviewer, Student Paper Contest 2011, 2013 organized by IEEE Communication Society, Bangladesh Chapter.
- Reviewer, IEEE ICTP, Dhaka, Bangladesh, 2015, 2017, 2019, 2021, 2023.
- Reviewer, ICECE, Dhaka, Bangladesh, 2010, 2012, 2014, 2016, 2018, 2020, 2022, 2024.
- Reviewer, ICIEV, Dhaka, Bangladesh, 2013, 2014.
- Reviewer, EICT, Khulna, Bangladesh, 2013.
- Member, Technical subcommittee of Tender evaluation of “conversion of existing PABX system into IP based PABX system and extension”, BSMMU, Dhaka-2012.
- Member, Technical subcommittee and Tender evaluation committee, Bangladesh Police, Dhaka-July, 2015-June, 2016.
- Reviewer, IEEE Sensors letter, IEEE Sensors Journal, IEEE Transactions on Wireless Communication (TWC), IEEE Wireless Communication letter (WCL), IEEE Transactions on Vehicular Technology (TVT), IEEE Transactions on Mobile Computing (TMC).
- Reviewer, Transactions on Emerging Telecommunication s Technologies (ETT).
- Reviewer, Majlesi Journal of Electrical Engineering (MJEE).
- Reviewer, Progress in Electromagnetic Research (PIER).
- Reviewer, Global Communication Conference (GlobeCom), 2007, 2012, 2014.
- Reviewer, International Symposium on Circuits and Systems (ISCAS), 2012.
- Reviewer, International Conference on Communication (ICC), 2012, 2010, 2009, 2008.
- Reviewer, International Conference on Computers, Communications and Networks (ICCCN), 2009.
- Member, Technical Program Committee, International Conference on Vehicular Technology- Fall (VTC-Fall) 2011.
- Reviewer, International Conference on Vehicular Technology- Fall (VTC-Fall) 2024, 2016, 2013, 2012, 2011, 2009.
- Reviewer, International Conference on Vehicular Technology- Spring (VTC- Spring) 2013, 2012, 2009.
- Reviewer, International Conference on Advances in Computing, Communications and Informatics (ICACCI), 2015.
- Reviewer, International Conference on Signal Processing, Informatics, Communications and Energy Systems (SPICES), 2015.
- Reviewer, International Conference on Computer Systems and Industrial Informatics (ICCSII), 2012.
- Reviewer, International Conference on Computer and Communication Engineering (ICOCOE), 2014.
- Reviewer, Conference Competition and Exhibition (CCE), 2014.
- Reviewer, International Symposium on Technology Management and Emerging Technologies (ISTMET), 2014.
- Reviewer, IEEE Symposium on Industrial Electronics and Applications (ISIEA), 2012.
- Reviewer, IEEE Symposium on Wireless Technology and Applications (ISWTA), 2012, 2013.
- Reviewer, IEEE Student Conference on Research and Development (SCoReD), 2012.
- Reviewer, IEEE International Power and Energy Conference (PECON 2012).
- Reviewer, IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE 2012).

## **PRESENTATION**

- Presented "0-3 GHz Spectrum Occupancy Measurement in Bangladesh for Cognitive Radio Purpose," in International Conference on Telecommunications and Photonics (IEEE ICTP), 2015.
- Presented "Game Theory based Distributed Approach for Power and Rate Allocation to Secondary Users in Cognitive Radio Networks," in International Conference on Informatics, Electronics and Vision (ICIEV), Dhaka, 2013.
- Presented "Cognitive Radio Networks: Challenges and Prior Efforts," organized by Dept. of EEE, BUET, Dhaka, 2010.
- Presented "Cognitive Radio Networks: Challenges and Prior Efforts," organized by Dept. of EEE, East-West University Bangladesh, Dhaka, 2010.
- Presented "Spectrum Usage Modeling, Forecasting and Resource Allocation in Cognitive Radio Networks," in Dept. of Electrical and Computer Engineering, Kansas State University, Manhattan, Kansas, USA, 2009.
- Presented "Modeling and Forecasting Secondary Users activity in Cognitive Radio Networks," in Dept. of Electrical and Computer Engineering, Kansas State University, Manhattan, Kansas, USA, 2007.
- Presented "Quality improvement of enhanced speech in DCT domain using modified a priori SNR," in IEEE Symposium on Signal Processing and Information Technology (ISSPIT), Germany, 2003.

## **CONTRIBUTION TO THE DEPARTMENT (UNIVERSITY) OTHER THAN TEACHING AND RESEARCH:**

- Curriculum Improvement.
- Supervising the conversion work of class rooms into multimedia classrooms.
- Serving as an active member of Bureau of Research, Testing and Consultation (BRTC) and have been involved in different testing and consultancy works.
- Serving as an advisor to undergraduate and graduate students.
- Provost, Sabekun Nahar Sony Hall, BUET (2024-).
- Member, Board of Undergraduate Studies (BUGS) (2002-).
- Secretary, Board of Undergraduate Studies (BUGS) (2020-2022).
- Member, Board of Postgraduate Studies (BPGS) (2010-).
- Member, Academic Council (2013-).
- Secretary, BUET Institutional Information System (BIIS) (2015-2020).
- Member, Recruitment committee of Lab Attendant, Department of CSE, BUET-2013.
- Member, Recruitment committee of MLSS, Department of NAME, BUET-2015.
- Member, Recruitment committee of Administrative Officer, Dean Office of Faculty of ME, BUET-2013.
- Member, Recruitment committee of Administrative Officer, Office of Controller of Examinations, BUET-2013.
- Member, Recruitment committee of Administrative Officer, Office of Directorate of Students Welfare (DSW), BUET-2017.
- Member, Recruitment committee of Programmer, Accident Research Institute (ARI), BUET-2023.
- Chairman, Recruitment committee of Electrician, Office of Chief Engineer, BUET-2021, 2022, 2023.
- Member, Recruitment committee of Assistant Warden of New Chattri Hall, BUET-2022.
- Member, Recruitment committee of Data Entry Operator, Comptroller Office, BUET-2021.
- Member, Recruitment committee of Data Entry Operator, Accident Research Institute (ARI), BUET-2021.
- Chairman, Recruitment committee of Cook (VC Office), BUET-2024.
- Member, Investigation committee of Forgery of Signature and Seal of Head of Department of Architecture, BUET-2016.
- Member, Investigation committee of Corruption against Two employees, BUET-2022.
- Chairman, Investigation committee of Non Responsive behavior of one Faculty member, BUET-2022.

- Member, Selection of Liveries Committee, BUET-2023.
- Member, Complaint Committee, BUET (2022-)
- Member, Gender Equality Committee, BUET (2023-)
- Member, Technical Committee, Information System Audit, BTRC, (2023-)
- Member, Updating Rate List, BTRC, (2023-2024)

**OTHERS:**

**Computer Skills:**

- Programming language: Python, MATLAB, C/C++, FORTRAN
- Operating systems: Windows, MS-DOS
- Package programs: MS-Office, Latex, PSpice

**Others:**

- “Teaching management and teaching learning process workshop,” organized by Directorate of Continuing Education (DCE), BUET, Dhaka-1000, Bangladesh, 2002.
- Served as a grader for undergraduate courses in Kansas State University (August, 2006-December, 2009).

**REFERENCES**

Will be made available upon request

I certify that all the statements made above are correct.

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Lutfu Akter