

Dr. Abul Kalam Azad

Associate Professor
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Objective

To build a long-term and successful academic career at the university level through experience, devotion, commitment and hard working

Academic Experiences

1. **Associate Professor** in the Department of Electrical and Electronic Engineering, University of Dhaka, Dhaka-1000, Bangladesh from October 31, 2018 to till.
2. **Assistant Professor** in the Department of Electrical and Electronic Engineering, University of Dhaka, Dhaka-1000, Bangladesh from January 29, 2014 to October 10, 2018.
3. **PhD Study** in the Department of Electronic and Information Engineering, The Hong Kong Polytechnic University, Hong Kong from September 13, 2012 to October 30, 2017.
4. **Lecturer** in the Department of Electrical and Electronic Engineering, University of Dhaka, Dhaka-1000, Bangladesh from November 08, 2009 to January 28, 2014.
5. **Lecturer** in the Department of Information and Communication Engineering, Southeast University, Banani, Dhaka-1213, Bangladesh from January 16, 2007 to November 07, 2009.
6. **Graduate Assistant** in the Department of Computer Science and Engineering, North South University, Banani, Dhaka-1213, Bangladesh for semesters Summer-2006, Fall-2006 and Spring-2007.

Administrative experiences

1. **'Assistant House Tutor'** to assist the resident students of Amar Ekushe Hall, University of Dhaka, Dhaka-1000, Bangladesh from 15 January 2018 to till.
2. **'Assistant House Tutor'** to assist the resident students of Dr. Muhammad Shahidullah Hall, University of Dhaka, Dhaka-1000, Bangladesh from 03 January 2011 to 09 September 2012.
3. **'Program Coordinator'** to coordinate the academic and administrative activities in the Departments of Computer Science and Engineering, and Information and communication Engineering, Southeast University, Banani, Dhaka-1213, Bangladesh from 01 January 2008 to 07 November 2009.

Academic Qualification

Name of Degree	: Doctor of Philosophy
Department	: Electronic and Information Engineering
Institute	: The Hong Kong Polytechnic University, Hong Kong SAR
PhD work	: <i>'Signal Processing for Brillouin Distributed Optical Fiber Sensing Systems'</i> under the supervision of Prof. Dr. Chao LU, Department of Electronic and Information Engineering, The Hong Kong Polytechnic University, Hong Kong SAR.
Name of Degree	: Master of Science
Department	: Applied Physics, Electronics and Communication Engineering
Institute	: University of Dhaka, Dhaka-1000, Bangladesh
Degree Awarded	: 2002 (exam held on 2005)
Result	: First Class, First Position
Marks Obtained	: 80.50 % (483 marks out of 600)
Thesis Work	: <i>'Design and Performance Evaluation of an Intelligent Maximum Power Point Tracker based on Artificial Neural Network'</i> - under the supervision of Prof. Dr. Subrata Kumar Aditya, Dept. of Applied Physics, Electronics & Communication Engineering, University of Dhaka.

Name of Degree : **Bachelor of Science**
 Department : Applied Physics, Electronics and Communication Engineering
 Institute : University of Dhaka, Dhaka-1000, Bangladesh
 Degree Awarded : 2001 (exam held on 2003)
 Result : **First Class, Third Position**
 Marks Obtained : **64.50 %** (2064 marks out of 3200)
 Project Work : 'A study on Bandgap energy measurement of GaAs by conductivity method'-
 under the supervision of Prof. Dr. Zahid Hasan Mahmud, Dept. of Applied
 Physics, Electronics & Communication Engineering, University of Dhaka.

Higher Secondary School Certificate

Institute : Notre Dame College
 Group, Passing Year & Result : Science, 1996, **First** Division with **Star** marks (**81.40%** marks)

Secondary School Certificate

Institute : Sayedpur High School
 Group, Passing Year & Result : Science, 1994, **First** Division with **Star** marks (**82.90%** marks)

Academic Award

1. **Hong Kong PhD fellowship** awarded by Research Grants Council, Hong Kong SAR to pursue PhD program in the Department of Electronic and Information Engineering at the Hong Kong Polytechnic University, Hong Kong SAR.
2. **Mirza Shamsul Huda and Mahmuda Begum Memorial Gold Medal** for excellent result in M.S. examination in the Department of Applied Physics, Electronics and Communication Engineering, University of Dhaka, Bangladesh.

List of Publications

(A) Journal Papers

1. **Abul Kalam Azad**, Faisal Nadeem Khan, Waled Hussein Alarashi, Nan Guo, Alan Pak Tao Lau, and Chao Lu, "Temperature extraction in Brillouin optical time-domain analysis sensors using principal component analysis based pattern recognition," *Optics Express*, ISSN: 1094-4087, vol. 25, No. 14, pp. 16534-16549, July 3, 2017.
2. **Abul Kalam Azad**, Liang Wang, Nan Guo, Hwa-Yaw Tam, and Chao Lu, "Signal processing using artificial neural network for BOTDA sensor system," *Optics Express*, ISSN: 1094-4087, vol. 24, No. 6, pp. 6769-6782, March 18, 2016.
3. **Abul Kalam Azad**, Liang Wang, Nan Guo, Chao Lu, and Hwa-Yaw Tam, "Temperature sensing in BOTDA system by using artificial neural network," *Electronics Letters*, ISSN: 0013-5194, vol. 51, No. 20, pp. 1578-1580, September 17, 2015.
4. **Abul Kalam Azad**, and Md. Mahsin, "Forecasting Exchange Rates of Bangladesh using ANN and ARIMA Models: A Comparative Study", *International Journal of Advanced Engineering Sciences and Technologies*, ISSN: 2230-7818, vol 10, no. 1, pp. 31-36, 2011.
5. **Abul Kalam Azad**, "Artificial Neural Network Approach for Stock Price Prediction : A study on Dhaka Stock Exchange", *Journal of the Bangladesh Electronics Society*, ISSN :1816-1510, vol. 9, no. 1-2, pp. 53-60, 2009.
6. **Abul Kalam Azad**, Md. Ashiqur Rahman, and Subrata Kumar Aditya-"Estimation of the maximum power and the normal operating power of a PV module using artificial neural network", *Southeast University Journal of Science & Engineering*, ISSN : 1999-1630, vol. 1, no. 1, pp. 74-82, 2008
7. Md. Ashiqur Rahman, Shafaat S. Giasuddin, Md. Shamim, Md. Badsha Alam, and **Abul Kalam Azad**, "Hardware Implementation of Data Encryption Standard using VerilogHDL", *Southeast University Journal of Science & Engineering*, ISSN : 1999-1630, vol. 1, no. 1, pp. 41-48, 2008.

(B) Conference Papers

1. **Abul Kalam Azad**, Liang Wang, Nan Guo, Chao Lu, and Hwa-Yaw Tam, "Temperature profile extraction using artificial neural network in BOTDA sensor system," in *The 20th Optoelectronics and Communications Conference (OECC)*, Shanghai, China, June 2015.
2. Biwei Wang, Nan Guo, Faisal Nadeem Khan, **Abul Kalam Azad**, Liang Wang, Changyuan Yu, and Chao Lu, "Extraction of Temperature Distribution Using Deep Neural Networks for BOTDA sensing system," in *The 16th International Conference on Laser and Electro-Optics Pacific Rim (CLEO-PR)*, Singapore, July 2017.

Major Courses Studied

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| ❑ Digital Signal Processing | ❑ Modern Physics |
| ❑ Image and Audio Processing | ❑ Digital Electronics |
| ❑ Signals and Systems | ❑ Electrical Circuits |
| ❑ Communication Engineering | ❑ Electronic Devices |
| ❑ Digital Data Transmission | ❑ Semiconductor Technology |
| ❑ Optical Fiber Communication | ❑ Material Science |
| ❑ Radio and Television Engineering | ❑ Measurement and Instrumentations |
| ❑ Mobile Cellular Communication | ❑ Control System Engineering |
| ❑ Satellite Communication | ❑ Artificial Intelligence |
| ❑ Optoelectronics | ❑ Microprocessor and Interfacing |
| ❑ Optical Integrated Circuit | ❑ Renewable Energy Technology |

Research Interest

- ❑ Optical Fiber Communication and Sensor Systems
- ❑ Renewable Energy Technology
- ❑ Artificial Intelligence

Computer Literacy

Simulation Software : MATLAB, ImageJ, VPIphotonics, HOMER, RETScreen,
Programming Language : C/C++
Operating System : Windows

Personal Particulars

Mother's Name : Aziza Begum	Gender : Male
Father's Name : Abdul Aziz	Marital Status : Married
Date of Birth : April 01, 1979	Nationality : Bangladeshi (by birth)

References

Prof. Dr. Subrata Kumar Aditya
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Prof. Dr. A. H. M. Asadul Haq
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I hereby declare that all information given herewith is accurate and up-to-date.



Dr. Abul Kalam Azad