

# Mohammad Ariful Haque, *Ph.D.*

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## Education

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Ph.D. in Electrical & Electronic Engineering,  
Department of Electrical and Electronic Engineering <http://www.eee.buet.ac.bd>,  
Bangladesh University of Engineering & Technology (BUET), Dhaka 1000.  
CGPA: **3.83 out of 4.00**

M.Sc. in Electrical & Electronic Engineering,  
Department of Electrical and Electronic Engineering <http://www.eee.buet.ac.bd>,  
Bangladesh University of Engineering & Technology, Dhaka 1000.  
CGPA: **3.92 out of 4.00**

B.Sc. in Electrical & Electronic Engineering,  
Department of Electrical and Electronic Engineering <http://www.eee.buet.ac.bd>,  
Bangladesh University of Engineering & Technology, Dhaka 1000.  
CGPA: **3.88 out of 4.00**

## Research Interest

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Biomedical signal processing, Adaptive filtering, System identification, Control systems

## Work Experience

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Teaching in the Department of Electrical & Electronic Engineering, Bangladesh University of Engineering and Technology, as an **Assistant Professor** (Feb'06-current) and **Lecturer** (Feb'06-Mar'03). Primary responsibility includes teaching the theory courses, taking lab classes, developing lab manuals and designing experiments. I have guided a number of students' projects on Biomedical instrumentation that include photoplethysmography, electronic stethoscope, electrocardiography, electrodermal activity etc. I have worked with speech enhancement, image processing, statistical toolbox, symbolic toolbox, control systems toolbox and simulink in Matlab.

I am an active member of the Bureau of Research, Testing and Consultation, BUET that provides consultation/advisory, research and testing services in the area of power, electronics, communication and computer.

## Thesis Title

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**Ph. D. Thesis:**Multimicrophone Speech Dereverberation with Noise for Hands-free Communication.

**M. Sc. Thesis:**Ultra Wideband Receiver Design for On-chip Wireless Interconnect.

**B. Sc. Thesis:**Design and Implementation of microprocessor based chopper.

## Publications

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### Journals:

1. **M. A. Haque**, Toufique Islam and M. K. Hasan, “Acoustic Channel Shortening with Spectrally Constrained Least-Square Minimization for Speech Dereverberation in Noise”, in press, Journal IET Signal Processing (formerly IEE Proceedings, UK), Apr., 2010.
2. **M. A. Haque** and M. K. Hasan, “Noise robust multichannel frequency-domain LMS-type algorithms for blind channel identification”, IEEE Signal Processing Letters, pp.305-308, vol.15, 2008.
3. **M. A. Haque** and M. K. Hasan, “Robust multichannel LMS-type algorithms with fast decaying transient for blind identification of acoustic channels”, Journal IET Signal Processing (formerly IEE Proceedings, UK), vol. 2, no. 4, pp.431-441, Dec. 2008.
4. **M. A. Haque** and M. K. Hasan, “Variable step-size multichannel frequency-domain LMS algorithm for blind identification of finite impulse response systems”, Journal IET Signal Processing (formerly IEE Proceedings, UK), vol. 1, no. 4, pp.182-189, 2007.
5. **M. A. Haque**, M. S. A. Bashar, P. A. Naylor, K. Hirose and M. K. Hasan, “Energy constrained frequency-domain normalized LMS algorithm for blind channel identification”, Signal, Image and Video Processing (SIVIP), Springer (UK), pp.203-213, 2007.

### Conferences:

1. M. A. Wahab, M. Adel Uzzaman, M. S. Hai, **M. A. Haque** and M. K. Hasan, “Variable stepsize LMS for nonblind system identification with noise”, Proc. of International Conf. on Electrical and Computer Engineering (ICECE 2008), vol. 1, pp. 428-433, Dec. 20-22, 2008, Dhaka, Bangladesh.
2. **M. A. Haque** and M. K. Hasan, “Performance comparison of the frequency-domain multichannel normalized and variable step-size LMS algorithms”, Proc. of 15th Eu-

ropean Signal Process. Conf., Sept. 3-7, 2007, Poznan, Poland.

3. **M. A. Haque** and M. K. Hasan, "Variable step size frequency domain multichannel LMS algorithm for blind channel identification with noise", Proc. of CSNDSP 2006, Jul. 19-21, 2006, Patras, Greece.
4. **M. A. Haque** and A. B. M. H. Rashid, "A new ultra wideband transceiver architecture for on-chip wireless interconnect", In Proc. of ICECE 2004, pp 76-79.
5. A. B. M. H. Rashid, **M. A. Haque**, N. Abdullah, M. Z. Islam, N. Sultana and M. R. Khan, "Integrated Antenna on Si for on chip wireless interconnect using UWB technology", In Proc. of ICECE 2004, pp 80-83.

### **Submitted Papers**

1. **M. A. Haque**, Toufiqul Islam and M. K. Hasan, "Robust Speech Dereverberation Based on Blind Adaptive Estimation of Acoustic Channels", submitted to IEEE Trans. Audio, Speech, Language Process.