

# Sarwar Morshed

## Curriculum Vitae

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in sarwarmorshed04



### Personal Details

Nationality : Bangladeshi  
Marital status : Married, and father of a 3 year old daughter  
Address : Enschede, The Netherlands  
Website : <http://wwwhome.cs.utwente.nl/~morsheds/>

### Career Objective

A challenging position where I can use my knowledge and skills into impactful innovations in the field of computer science and communications engineering. With a result oriented "Can do" attitude and pragmatic mindset, I bring my problem-solving approach together with analytic, communicative, and self-starting skills to facilitate the growth of the company.

### Work Experiences

**PhD Researcher in  
Computer Science**  
2012 Feb-present

#### **University of Twente, The Netherlands**

*Design and Analysis of Communication Systems (DACS) Research Group  
(Finishing in March 2017 – Received the PhD defense date)*

- Working as a researcher in the Wireless Ad-hoc Links using robust Noise-based Ultra-wideband Transmission (WALNUT) project with industry partners: *NXP, Thales, TNO, Plantronics, DevLab, STmicroelectronics.*
  - Creation of scope for a new energy-efficient medium access control (MAC) communication protocol, TR-MAC, for low-power wireless sensor networks.
  - Design and analytical modelling of the protocol features and requirements
  - Building system level prototypes for feasibility and specifications using state machines and programming tools, e.g. Matlab, Python
  - Proof of concept for the protocol features using C++ in the discrete event driven C++ based OMNeT++ simulator, published scientific publications
  - Supervising Masters & Bachelor students for research projects (Still ongoing)
  - Organized research paper reading clubs among researchers of different groups to increase collaboration
- ❖ *Skills used:* Creation of scope, Design of technical solutions, Mathematical modelling, Research, Collaboration, C++, Matlab, Python, OMNeT++

**Senior Lecturer**  
2009 Nov-2012 Jan

#### **Islamic University of Technology, Bangladesh**

*Department of Computer Science and Engineering*

- Taught: Communications Engineering and Performance Evaluation
- Organized ICCIT 2010 Conference
- Supervised Bachelor students for their Bachelor thesis
- Organized and instructed in workshops, seminar and short courses

**Research Assistant**  
2008 July-2009 Oct

#### **Tampere University of Technology, Finland**

*Wireless Communications and Positioning Research Group*

- Worked in EUREKA/CELTIC B21C (Broadcasting for 21st Century) project to finalize DVB-T2 (Digital Video Broadcasting - 2<sup>nd</sup> generation Terrestrial) standard through proposal implementation in Matlab and C++ based CCSS
- Data collection, analysis and testing of the DVB-T2 standard
- Analyzed Synchronization performance for DVB-T2 system

**Lecturer**  
2005 Oct-2007 Aug

**Islamic University of Technology, Bangladesh**  
*Department of Computer Science and Engineering*

- Responsible for networking lab for establishing secure systems, preparing users, designing system specification, maintaining system performance & performing scheduled updates
- Design, size, safety, security, management of University LAN
- Administrated the official university website using MySQL, PHP and Apache

### Education

**Masters in Information Technology**  
2007 Sep-2009 Oct

**Tampere University of Technology, Finland**  
Wireless Communications and Positioning Research Group  
*CGPA: 4.72 out of 5.00* (First class with distinction)  
*Thesis:* Synchronization performance for DVB-T2 systems  
*Skills used:* Design, Modelling, C++, Matlab, C++ based CCSS simulator

**Bachelor in Computer Science**  
2002 Jan-2005 Sep

**Islamic University of Technology, Bangladesh**  
*CGPA: 4.96 out of 5.00* (3<sup>rd</sup> in Merit position, First class with distinction)  
*Thesis:* Design of a flexible grid architecture and developing applications  
*Skills used:* C++, Linux, Application development

**Higher Secondary Certificate (HSC)**  
1999-2001

**Notredame College, Bangladesh**  
*Result:* 1<sup>st</sup> Division with distinction  
*Marks: 88.3%*

**Secondary School Certificate (SSC)**  
1990-1999

**Motijheel Model High School and College, Bangladesh**  
*Result:* 1<sup>st</sup> Division with distinction  
*Marks: 88.9%*

### Professional Skills

- Creation of scope and design technical solutions
- Mathematical and Analytical modelling
- Programming languages: C, C++, Matlab, Python
- Event driven network simulators: OMNeT++
- Familiar with Linux, Eclipse, Scrum, Git, CCSS, Simulink
- Data and web systems: PHP, MySQL, Apache

### Extra curricular activities

2014-2015

Activity Manager in a student organization in University of Twente

- Organized events and activities for social community events
- Facilitated integration of new students through practical support sessions

### Scholarships and awards

2009

- Awarded University grant award for outstanding result in Master of Science in Tampere University of Technology, Finland

2003-2005

- Received scholarship for achieving CGPA 5.00 out of 5.00 for consecutive 5 semesters during Bachelor from the University

1999 & 2001

- Government Scholarships in SSC & HSC for ranked in top 1% students

1996

- Achieved Gold medal for 'Best Student Award' in Junior level

**Languages**

Mother tongue: Bangla, Fluent: English (IELTS: 7), Intermediate: Dutch (B1)

**Self-assessment**

Analytical & Strategic, Result-driven, Responsible, Team player, Communicative

**Interests**

Travelling, Automotive, Sports, Reading, International history & politics

**References**

References can be provided upon request