Dr. Nasim Mahmud

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| ***Machine Learning Technology Lead***  ***Learnovate Centre***  School of Computer Science and Statistics  Trinity College Dublin (TCD) Ireland | ***Research Fellow (AI - RecSys)*** ***Insight Centre for Data Analytics***  School of Computer Science  University College Dublin (UCD)  Ireland | M: +353 (0) 89 983 87 24  E: nasim@mahmud.be  U: [www.mahmud.be](http://www.mahmud.be) |

***Summary***

I am an expert in Machine Learning and Insight Mining (Data Analytics) with substantial experience in project management, as well as research and development (R&D). I have worked in a number of EU funded research projects and collaborated with industry partners.

***Research Interests***

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| *Data Science and Software Engineering:* Machine Learning, Data Analytics,  Big Data (Versatile Data),  Human-Centred Software Engineering | *Human-Computer Interaction:*  Social Computing (Social Informatics,  Data Mining – Digital Human Modeling), Human Computer Interaction |

***Experience***

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| ***Machine Learning Technology Lead*** *(2016- …)*  *Learnovate Centre* School of Computer Science and Statistics Trinity College Dublin, Ireland  [www.learnovatecentre.org](http://www.learnovatecentre.org)  The *Learnovate Centre* is an industry-led centre of excellence in learning innovation in *School of Computer Science and Statistics, Trinity College Dublin,* Ireland. The institute works in partnership with companies like Intel, Microsoft, Fidelity Investments, H2, etc. It is also jointly funded by Enterprise Ireland and IDA within Ireland’s Technology Centre Programme.  — My job duty includes:   1. Leading the *Machine Learning and Data Analytics* research team 2. Working closely with industry partners 3. Lead and participate in defining core projects 4. Lead the design and implementation of application prototypes based on state-of-the-art research output from areas such as recommender systems, reputation systems, information retrieval, machine learning and data miming 5. Organise and support testing and trialing of application prototypes 6. Publish and disseminate of results, prepare technical documentations, etc. | |
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| ***Research Fellow (Artificial Intelligence - Recommender System)*** (2016- …) *Insight Centre for Data Analytics*  UCD School of Computer Science  University College Dublin, Ireland  [www.insight-centre.org](http://www.insight-centre.org)  The *Insight Centre for Data Analytics* is one of Europe’s largest data analytics research organisations, with over 350 researchers, more than 40 industry partners and over €88 million of funding. Insight is made up of four main centres: Insight@UCD, Insight@DCU, Insight@NUI Galway and Insight@UCC as well as a number of affiliated bodies.  — My job duty includes:   1. Conduct research in *Machine Learning, Big Data Analytics* 2. Research in Natural Language Processing (*NLP), Sentiment mining etc. using AI* 3. Design, develop and coordinate research projects for core research funding 4. Mange research and development activities, evaluation and data analysis 5. Communication, negotiation with (academic/industry) partners and funding authorities 6. Writing reports, project proposals etc. | |
| ***Technology Lead and Postdoctoral Research Fellow*** *(2013 - 2015)  Dynamics Lab*  UCD Geary Institute  University College Dublin, Ireland  <http://www.dl.ucd.ie>  *Dynamics Lab* is a data intensive lab in UCD Geary Institute. The *Dynamics Lab* fosters an interdisciplinary approach to research and postgraduate training and hosts a growing number of funded research projects in dynamic social network analysis, agent-based simulation, decision modeling, etc.  — Job duty includes:   1. Project management and industry collaboration 2. Leading the technical research, design and development work of the project 3. Analyse structured networked data (SNA) and unstructured text analysis 4. Analyse high-velocity data from heterogeneous sources (e.g., smart homes) 5. Communication, writing project proposals etc. | |
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| ***Data Scientist and HCI Domain Expert*** *(2013-2015)*  *AUTHENTIC Project (joint project)* UCD School of Computer Science, Tyndall National Institute, Ireland and Cork University, Ireland [www.nimbus.cit.ie/authentic/](http://www.nimbus.cit.ie/authentic/)  *AUTHENTIC Project* seeks to design and deliver a system capable of supporting *opportunistic decision* making pertaining to effective energy management within smart-homes. This necessitates the potential development and integration of Machine Learning/Artificial Intelligence algorithm with the key enabling technologies including a variety of physical sensors within the home (temperature, contact sensors, passive Infra-Red), cyber sensor sources outside of the home (e.g. meteorological data and energy providers dynamic pricing sites), together with effective interfacing with the smart grid.  — Job duty includes:   1. Conduct Machine Learning/Predictive analysis for opportunistic decision making 2. Analyse large amount of high-velocity versatile data for behaviour modeling 3. Contributing in the design and development of interactive prototype systems 4. Project management and collaboration with the industry and funding bodies 5. Research dissemination | |
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| ***Research Consultant*** *(2014-2015)* (*Contract Research* with UCD)  Fidelity Investments Ireland [www.fidelity.com](http://www.fidelity.com)  Fidelity Investment provides technology and operational business services to a diverse set of businesses in the U.S., Europe and Asia, and currently employs approximately 1,000 individuals in its Dublin and Galway offices.  — Job duty includes:   1. Project management and research design to gain insight of employee data 2. Secure funding, communication, proposal and report writing 3. Collaborate and communicate with the partners | |
| **Assistant Professor** (on sabbatical)  Department of Computer Science and Engineering  (Human-Computer Interaction)  University of Liberal Arts Bangladesh  <http://www.ulab.edu.bd>  University of Liberal Arts Bangladesh (ULAB) is specialized university in the country that focuses on the modern liberal arts education and research.  — Job duty includes:   1. Student administration 2. Design and develop course module and teaching 3. Project management 4. Writing project proposals, secure funding, etc. | |
| ***Postdoctoral Researcher*** *(2012)*  *Expertise Centre for Digital Media (EDM)*  Human-Computer Interaction Lab  Hasselt University, Belgium  <http://www.uhasselt.be/edm>  *Expertise Centre for Digital Media (EDM)* in Hasselt University is a specialized lab that works closely with the industry to solve most challenging problems.   — Job duty includes:  a. Research, design, development and evaluate systems  b. Research dissemination and publishing  c. Teaching assistant  d. Student advising | |
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| **Doctoral Researcher and Teaching Assistant (2008 - 2012)**  Expertise Centre for Digital Media (EDM),  Human-Computer Interaction Lab  Hasselt University,  Belgium  <http://www.uhasselt.be/edm> | — Job duty includes:  a. Research in HCI, ML and Collective Intelligence  b. Design, develop and evaluate systems  c. Research dissemination and publishing research outcomes  d. Teaching assistant  e. Student advising |
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| **Researcher - Interaction Design Engineer (2007)**  SatMax Project (Man-Machine Interaction (MMI) for Marine Stabilized Satellite Communication Systems)  SatPoint AB, Stockholm,  Sweden,  <http://www.satpoint.se> | —Job duty includes:  a. Research in UxD and UCD  b. Contextual enquiry, participant observation  c. Develop interactive system for marine-satellite communication system  d. Evaluate system  e. Writing technical report |

***Entrepreneurship***

I am co-founder of the Bangladesh Online Radio, an ***online social network*** as well as an *online radio* site. The goal of this initiative is to provide a *model online platform* for gathering collective intelligence in order to promote informed decision making and to empower democracy by ensuring participation of underprivileged people through so-called citizen journalism in developing countries, e.g., Bangladesh. I have designed and developed the site utilizing open source Web 2.0 frameworks.

URL: www.BangladeshOnlineRadio.com (currently dormant state)

***Education***

***PhD (Computer Science)***Hasselt University, UHasselt, *Belgium* and

Maastricht University, UM, *Netherlands* (jointly awarded)   
  
**Thesis:** *Exploiting Context-awareness and Social Interaction to*

*Provide Help in Large–scale Environments*  
 ***Studied Masters in Interactive Systems Engineering (ISE)***Department of Computer and System Sciences  
Royal Institute of Technology, KTH, Sweden and  
Stockholm University, SU, *Sweden*

***Masters in Computer Science and Engineering***

Department of Computer Science and Engineering  
University of Dhaka, *Bangladesh*

***B.Sc. (Honors, 4 years) in Computer Science and Engineering***

Department of Computer Science and Engineering  
University of Dhaka, *Bangladesh*

***Computer Skills***

* I have long experience of working with several programming languages including R, Big R, Java, Android (Mobile programming with Java), C, C++, Borland Visual C++, Python, Assembly Language, HTML, PHP, CSS and Perl (with different skill levels.)
* I have experience of working with various machine learning and data-scientists’ tools, e.g., R, Octave, Mahout, MS Azure ML, Weka; and SNA tool e.g., Gephi, NodeXL etc.
* I have experience in managing Linux root servers. Have experience of Big Data technologies, e.g., Hadoop (cloudera-yahoo suite), MapReduce, etc.

***Honours, Awards and Grants (Short list)***

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* Fidelity Investments Contract Research Grant (UCD) (2015)
* H2020-Enterprise Ireland Application Support Grant (Stg) (2014)
* Award of Scientific Excellence. International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMs’12) Award sponsored by INDRA, IBM-INSA, DEIMOS, BISITE Research Group. (2012)
* Recipient of PhD Fellowship Award for four years from European Union / FWO Research Funding. (2008-2012)
* Recipient of full tuition fee waiver for four years from Hasselt University, Belgium/FWO Research Funding. (2008-2012)

CV-Infographic

[Nasim Mahmud]