Curriculum Vitae
of
Bikash Chandra Singh
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PROFESSIONAL EXPERIENCE

Postdoctoral Fellow:
4th January 2021 to 16th April 2022
Dept. of Electronic and Information Engineering and Dept. of Computing, The Hong Kong Polytechnic University, Hong Kong.

Associate Professor:
5th May 2019 to 28th November 2020
Department of Information & Communication Technology, Islamic University, Kushtia-7003, Bangladesh.

Assistant Professor:
18th April 2013 to 4th May 2019
Department of Information & Communication Technology, Islamic University, Kushtia-7003, Bangladesh.

Lecturer:
18th April 2010 to 17th April 2013
Department of Information & Communication Technology, Islamic University, Kushtia-7003, Bangladesh.

Assistant Programmer:
15th September 2008 to 17th April 2010
Bangladesh Computer Council (BCC), Agargaon, Dhaka, Bangladesh.

RESEARCH INTERESTS:

Data Privacy and Security, Machine learning, Big data analytic, Internet of things (IoT), Online Social Networks Analysis, and Blockchain Systems.

EDUCATION:

Doctor of Philosophy (PhD):
PhD in Computer Science
September 2015 - October 2018
University of Insubria, Italy.
Thesis title: Privacy Preference Mechanisms in Personal Data Storage (PDS)
Supervisor: Prof. Elena Ferrari
Co-supervisor: Prof. Barbara Carminati

Master of Science (M.Sc.):
Information & Communication Engineering,
October 2005 - December 2006,
Islamic University, Kushtia, Bangladesh.
Result: **First Class (Position: First)**
Dissertation: "Channel based Simulation and Analysis of IEEE 802.16-2004/WMAN-OFDM Physical Layer for BWA to support Telemedicine", published at Complex Medical Engineering (CME), IEEE/ICME International Conference, Australia.
Supervisor: Prof. M. Mahbubur Rahman

Bachelor of Science (B.Sc.):
Information & Communication Engineering,
March 2001 - September 2005, Islamic University, Kushtia, Bangladesh.
Result: **First Class (Position: Second)**

Dissertation: "Developing and Implementing Touch Screen for Controlling Public Information System." published at International Conference on Electronics, Computer and Communication, Rajshahi University, Bangladesh.
Supervisor: Prof. M. Mahbubur Rahman.

PROJECTS:

1. BC-PPDS: Blockchain based Privacy-aware Framework for Personal Data Storage, financial support by University Grants Commission (UGC), Bangladesh, 2019-2020

2. Information Technology Research and Resource Center (ITRRC) of HEQEP funded by the World Bank,2011-2013

RESEARCH EXPERIENCE:

Researcher:	**01st September 2015 to 30th September 2015** Academia Sinica, Taiwan.
PhD Research Student	**01st September 2014 to 30 December 2014** Dankook University, South Korea.

LIST OF PUBLICATIONS:

In Submitted/Preparation:

[4] **B. C. Singh,** H. Hu, "Privacy Preference framework for multidimensional blockchain data" in preparation.

[3] Dipankar Kumaer Mondal, **B. C. Singh***, "BC-P2DS: Blockchain based Privacy-aware Framework for Personal Data Storage", International Journal of Information Security, submitted for publication, status: under review.

[2] **B. C. Singh**, Qingqing Ye, Haibo Hu, Bin Xiao, " Efficient and Lightweight Indexing Approach for Multi-dimensional Historical Data in Blockchain" submitted for publication, status: **major revision**.

[1] Nosin Ibna Mahbub, Nilufa Yeasmin, **B. C. Singh*,** Zulfikar Alom, Mohammad Abdul Azim, "Analysis and Prediction of User Sentiment on COVID-19 Pandemic using tweets", submitted for publication, status: under review.

International Journal:

[17] Md. Abu Rumman Refat, **B. C. Singh***, Mohammad Muntasir Rahman , "SentiNet: A Non Verbal Facial Sentiment Analysis Using Convolutional Neural Network" International Journal of Pattern Recognition and Artificial Intelligence (SCIE, IF: 1.40), 2022.

[16] Dipankar Kumar Mondal, **B. C. Singh***, H. Hu, Shivazi Biswas, Zulfikar Alom, Mohammad Abdul Azim, "SeizeMaliciousURL: A Novel Learning Approach to Detect Malicious URLs," Information Security and Applications, (SCIE, IF: 3.87), 2021.

[15] **B. C. Singh**, Zulfikar Alom, H. Hu, Mohammad Muntasir Rahman, Mrinal Kanti Baowaly, Zeyar Aung, Mohammad Abdul Azim, Mohammad Ali Moni, "COVID-19 Pandemic Outbreak in the Subcontinent: A data-driven analysis", Journal of Personalized Medicine, (SCIE, IF: 4.99), 2021.

[14] **B. C. Singh**, B Carminati, E Ferrari , "Privacy-aware Personal Data Storage (P-PDS): Learning how to Protect User Privacy from External Applications", IEEE Transactions on Dependable and Secure Computing (TDSC), (SCI, IF: 7.329), 2021.

[13] Zulfikar Alom, **B. C. Singh**, Zeyar Aung, Mohammad Abdul Azim, "Knapsack Graph based Privacy Checking for Smart Environments", Computers & Security, (SCIE, IF: 4.438), 2021.

[12] M. M. Rahman, M. A. Hena, **B. C. Singh**, M. A. Hossain, "Performance Analysis of Feature-based Automated Measurement of Mouse Social Behavioral", IITM Journal of Management and IT, 2020.

[11] Md. Protikuzzaman, Mrinal Kanti Baowaly, Maloy Kumar Devnath and **B. C. Singh**, "Predicting Undergraduate Admission: A Case Study in Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Bangladesh" International Journal of Advanced Computer Science and Applications (IJACSA), 11(12), 2020, (Scopus).

[10] M. S. Alam, M. M. Rahman, M. A. Hossain, M. K. Islam, K. M. Ahmed, K. T. Ahmed, **B. C. Singh**, M. S. Miah, "Automatic Human Brain Tumor Detection in MRI Image Using Template-Based K Means and Improved Fuzzy C Means Clustering Algorithm", Big Data and Cognitive Computing, 2019, *3*(2), 27, (Scopus).

[9] **B. C. Singh**, Md. Sipon Miah, T. K. Godder, "CP-PDS: Contextual Privacy-aware Framework for Personal Data Storage", ULAB Journal of Science & Engineering, ISSN-2079-4389, 2018.

[8] Md Ruhul Amin, Md Mahbubur Rahman, Mohammad Amazad Hossain, Md Khairul Islam, Kazi Mowdud Ahmed , **B. C. Singh,** and Md Sipon Miah, "Unscented Kalman Filter Based on Spectrum Sensing in a Cognitive Radio Network Using an Adaptive Fuzzy System ", *Big Data Cogn. Comput.* 2018, *2*(4), 39, (Scopus).

[7] **B. C. Singh**, Mohammad Muntasir Rahman, Md. Sipon Miah, Mrinal Kanti Baowaly, "Community Detection Using Node Attributes and Structural Patterns in Online Social Networks," Computer and Information Science 10(4): 50-59 (2017).

[6] W.-Y. Shin, **B. C. Singh**, J. Cho, and A. Everett, "A new understanding of friendship in space: Complex networks meet Twitter," *J. Inf. Sci.* (Special Issue on Recent Advances on Big Social Data), vol. 41, no. 6, pp. 751-764, Dec. 2015. (SSCI).

[5] P.C. Barman, M.D. Hossain A. K. Mandal, **B. C. Singh**, and M. S. Miah, "NMF and PCA Techniques for Feature Extraction and Classification," Journal of Science and Technology, Vol. 9 & 10, ISSN 1994-0368, June 2012.

[4] B. C. Singh, Paresh Chandra Barman, Tapan Kumar Godder, Md. Sipon Miah and H.M Abdul Awal "Experimental Analysis of Handover over UDP and TCP in the Integration of IEEE 802.16 and IEEE 802.11", ULAB Journal of science and engineering vol. 2, no. 1, November 2011 (ISSN: 2079-4398).

[3] B. C. Singh, T K Godder, Md. Sipon Miah and H. M. Abdul Awal, "Experimental Analysis of UDP Performance in Mobile Ad Hoc Networks with Different Routing Protocols and Varying Payload", International Journal of Distributed and Parallel Systems (IJDPS) Vol.2, No.06, November 2011.

[2] Paresh Chandra Barman, Md. Sipon Miah, **B. C. Singh** and Mst. Titasa Khatun,"MRI Image Segmentation using level set method and implement a medical Diagnosis System", Computer Science & Engineering: An International Journal (CSEIJ), Vol.1, No.5, December 2011.

[1] Paresh Chandra Barman, **B. C. Singh** and Md. Sipon Miah, "Feature Extraction and Clustering in Text Mining using NMF basis Probability", ULAB Journal of Science & Engineering, ISSN-2079-4389, Vol. 2, pp. 50-55, Nov. 2011.

International Conference:	[5] Nosin Ibna Mahbub, Al Amin, Md. Khairul Islam, **Bikash Chandra Singh**, Md. Imran Hossain Showrov, Anirudda Sarkar, "Sentiment Analysis of Microblogging Dataset on Coronavirus Pandemic", 5th International Conference on Electrical Information and Communication Technology, 2021, KUET, Bangladesh, **accepted**. [4] Mrinal Kanti Baowaly, George William Kibirige and **B. C. Singh** "Co-Comment Network: A novel approach to construct social networks within Reddit", in the Proceedings of 8th International Conference on Knowledge Engineering (ICKE 2021), **accepted.** [3] **B.C. Singh**, B. Carminati, E. Ferrari, "Learning privacy habits of PDS owners", in the proceedings of the IEEE 37th International Conference on Distributed Computing Systems (ICDCS), 5-8 June 2017, Atlanta, GA, USA. [2] **B.C. Singh**, B. Carminati, E. Ferrari, "A Risk-Benefit Driven Architecture for Personal Data Release", in the proceedings of the IEEE 17th International Conference on Information Reuse and Integration, University of Pittsburgh, Pennsylvania, USA, July 28-30, 2016. [1] **B. C. Singh**, M. Mahbubur Rahman, Tapan, K. Godder, Abu L. and Md. R. Bashar, "Channel based Simulation and analysis of IEEE802.16 (WiMAX) — 2004/WMAN-OFDM physical layer for BWA to support Telemedicine", Complex Medical Engineering (CME), IEEE/ICME International Conference, 13-15 July 2010, page:231 – 236 , Print ISBN **:** 978-1-4244-6841-6.
Korean Domestic Conference:	[1] **B. C. Singh**, B. Ha, J. Cho, and W.-Y. Shin, "Friendships in space: Complex networks meet Twitter,"in *Proc.Korea Inf. Commun. Society (KICS) Winter Conf.,*JeongSeon, Korea, Jan. 2015, pp. 331-332.

ORAL PRESENTATION:

[3] Learning privacy habits of PDS owners. IEEE 37th International Conference on Distributed Computing Systems (ICDCS), 5-8 June 2017, Atlanta, GA, USA.

[2] A Risk-Benefit Driven Architecture for Personal Data Release. IEEE 17th International Conference on Information Reuse and Integration, University of Pittsburgh, Pennsylvania, USA, July 28-30, 2016.
[1] A Risk-Benefit Driven Architecture for Personal Data Release, Padova University, Italy, 2016.

SCHOLARSHIPS AND AWARDS:

- Postdoctoral Fellowship, The Hong Kong Polytechnic University, Hong Kong, 2021.
- Italian Government Scholarship for PhD, Computer Science, University of Insubria, Italy from October 2015 to September 2018.
- Recipient of TIGP Fellowship for PhD, Taiwan, September 1, 2015 to September 30, 2015.
- Recipient of BK21+ Fellowship for PhD, South Korea, September 1, 2014 to December 31, 2014.
- Recipient of the Talent Pool University Scholarship for obtaining Grade: A- in MSc degree (1st Position in order of merit) at the Islamic University, Kushtia-7003, Bangladesh from 2005 to 2006.
- Recipient of the Talent Pool University Scholarship for obtaining First Class Honors degree (2nd Position in order of merit) at the Islamic University, Kushtia-7003, Bangladesh from 2002 to 2005.

OTHERS ACTIVITIES:

- Technical Program Committee (TPC) member of the International Conference on Sustainable Technologies for Industry 4.0 (STI 2020).
- Reviewer of the IEEE Transactions on Dependable and Secure Computing (TDSC).
- Transactions on Emerging Telecommunications Technologies

REFEREE

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