Surjya Ghosh

CONTACT
INFORMATION

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CSE Dept., IIT Kharagpur,   E-mail: surjya.ghosh@gmail.com
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West Bengal, India.

RESEARCH
INTERESTS

Affective Computing, Human-Computer Interaction, Smartphone Computing and Applications.

EDUCATION

Indian Institute of Technology Kharagpur, WB, India.   2015 - to date

- PhD. in Computer Science & Engineering
- Advisors: Dr. Bivas Mitra & Prof. Niloy Ganguly

Indian Institute of Technology Kharagpur, WB, India.   2012 - 2014

- M.Tech. in Information & Communication Technology
- **CGPA: 9.53/10**
- Thesis: Dynamic Community Detection In Evolutionary Network.

Haldia Institute of Technology, Vidyasagar University, WB, India.   1999 - 2003

- B.Tech.(Honors) in Computer Science & Engineering
- **Aggregate: 87.5%**
- Thesis: Workflow Implementation in Library Management System.

Kola Union High School, Kolaghat, WB, India.   1999

- Higher Secondary Examination (std. XII) (W.B.C.H.S.E.)
- **Aggregate: 88.9%**

Kola Union High School, Kolaghat, WB, India.   1997

- Secondary Examination (std. X) (W.B.B.S.E.)
- **Aggregate: 87.25%**

PUBLICATIONS

[1] **Surjya Ghosh**, Shivam Goenka, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Representation Learning for Emotion Recognition from Smartphone Keyboard Interactions", 8th International Conference on Affective Computing & Intelligent Interaction (ACII 2019), Cambridge, UK. (Accepted)

[2] **Surjya Ghosh**, Kaustubh Hiware, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Emotion Detection from Touch Interactions during Text Entry on Smartphones", International Journal of Human-Computer Studies, Elsevier, 2019. **(Impact Factor: 2.3)**.

[3] **Surjya Ghosh**, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Designing An Experience Sampling Method for Smartphone based Emotion Detection", IEEE Transactions on Affective Computing, 2019. **(Impact Factor: 4.585)**

[4] **Surjya Ghosh**, Kaustubh Hiware, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Does Emotion Influence the Use of Auto-suggest during Smartphone Typing?", 24th International Conference on Intelligent User Interfaces (ACM IUI 2019), Los Angeles, USA.

[5] **Surjya Ghosh**, Sumit Sahu, Niloy Ganguly, Bivas Mitra, and Pradipta De, "EmoKey: An Emotion-aware Smartphone Keyboard for Mental Health Monitoring", 11th International Conference on Communication Systems and Networks (COMSNETS 2019), Bangalore, India (Poster). **(Best Paper Award - 3rd Place)**

[6] **Surjya Ghosh**, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Effectiveness of Deep Neural Network Model in Typing-based Emotion Detection on Smartphones", 24th Annual International Conference on Mobile Computing and Networking (ACM Mobicom 2018), New Delhi, India (Poster).

[7] **Surjya Ghosh**, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Evaluating Effectiveness of Smartphone Typing as an Indicator of User Emotion", 7th International Conference on Affective Computing and Intelligent Interaction (ACII 2017), San Antonio, Texas, USA.

[8] **Surjya Ghosh**, Niloy Ganguly, Bivas Mitra, and Pradipta De, "TapSense: Combining Self-Report Patterns and Typing Characteristics for Smartphone based Emotion Detection", 19th International Conference on Human-Computer Interaction with Mobile Devices and Services (ACM MobileHCI 2017), Vienna, Austria.

[9] **Surjya Ghosh**, "Emotion-aware Computing using Smartphone", 9th International Conference on COMmunication Systems & NETworkS (COMSNETS 2017, Graduate Forum), Bangalore, India.

[10] **Surjya Ghosh**, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Towards Designing an Intelligent Experience Sampling Method for Emotion Detection", 14th Annual IEEE Consumer Communications & Networking Conference (IEEE CCNC 2017), Las Vegas, USA.

[11] **Surjya Ghosh**, Vatsalya Chauhan, Niloy Ganguly, Bivas Mitra, and Pradipta De, "Impact of Experience Sampling Methods on Tap Pattern based Emotion Recognition", 4th ACM Workshop on Mobile Systems for Computational Social Science - MCSS (ACM Ubicomp.15) Osaka, Japan.

[12] Rohit Verma, **Surjya Ghosh**, Saketh Mahankali, Niloy Ganguly, Bivas Mitra, and Sandip Chakraborty, "ComfRide: A Smartphone based System for Comfortable Public Transport Recommendation", 12th ACM Conference on Recommender Systems (ACM RecSys 2018), Vancouver, Canada.

[13] Rohit Verma, **Surjya Ghosh**, Niloy Ganguly, Bivas Mitra, and Sandip Chakraborty, "Smartphone based Spatio-temporal Sensing for Annotated Transit Map Generation", 25th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2017) California, USA.

[14] Rohit Verma, **Surjya Ghosh**, Aviral Shrivastava, Niloy Ganguly, Bivas Mitra, and Sandip Chakraborty, "Unsupervised Annotated City Traffic Map Generation", 24th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2016) California, USA.

[15] Suman Kalyan Maity, Ankan Mullick, **Surjya Ghosh**, Anil Kumar, Sunny Dhamnani, Sudhansu Bahety, and Animesh Mukherjee, "Understanding Psycholinguistic Behavior of Predominant Drunk Texters in Social Media", In IEEE ISCC Workshops - ICTS4eHealth (2018) Natal, Brazil. **(Best Paper Award)**

[16] Debajyoti Mukhopadhyay, Animesh Mukherjee, **Surjya Ghosh**, Poulami Chakraborty , and Sudipta Biswas, "A New Approach for Message Hiding in Steganography and Audio Hiding using Substitution Technique", Journal of The Institution of Engineers, Computer Engineering Division, India, 86(2), 41– 44.

AWARDS AND ACHIEVEMENTS	• Received University Silver Medal for ranking 2nd in B.Tech. (Computer Science & Engineering), Vidyasagar University, India.
	• Qualified in UGC-NET for Assistant Professor in Jun 2014.
	• Ranked 10th in merit panel of Assistant Professor at WBCSC in July 2016.
	• Received Microsoft Research India Travel Grant for attending UbiComp 2015, MobileHCI 2017, IUI 2019.
	• Received IUI Student Travel Grant for attending IUI 2019.
	• Received Student Scholarship for attending Mobicom 2018.
	• Received COMSNETS Travel Grant for attending COMSNETS 2017, 2018, 2019.
	• Received ACII Student Travel Grant for attending ACII 2017.
PROFESSIONAL ACTIVITIES	• Reviewer of AffCon workshop, co-located with AAAI 2019.
	• TPC member of ACM S^3 workshop, in conjunction with Mobicom 2018.
	• Student Volunteer at ACM IUI 2019.
	• Organized International Conference on the Networked Digital Earth (ICNDE) at IIT Kharagpur, March 2018 as student volunteer.
	• Organized short-term school and workshop, MLCN (Machine Learning and Complex Network) at IIT Kharagpur, Feb 2015 as student volunteer.
INDUSTRY EXPERIENCE	**SAP Consultant**, *Capgemini India*, Kolkata, India, Jul 2014 - Jan 2015.
	• Led the SAP CRM Implementation of SAB Miller Account.
	• Worked in SAP CRM Competency to conduct training and interviews.
	Senior Advisory Consultant, *IBM India*, Kolkata, India, Mar 2013 - Mar 2014.
	• Worked as a SAP CRM Functional Consultant for Welch Allyn project.
	Assistant Consultant, *TATA Consultancy Services Ltd.*, India, Oct 2003 - Mar 2013.
	• Worked as a SAP CRM Functional Consultant for RAPDRP implementation project.
	• Worked as a SAP CRM Functional Consultant for AGL Energy Limited at Melbourne, Australia.
	• Worked as a Business Analyst for CitiGroup at Irving, Texas, USA.
	• Worked as a Software Developer for Eli Lilly and Company at Indianapolis, USA.
TEACHING ASSISTANTSHIPS	Ubiquitous Computing (CS60055). Operating Systems (CS30002). Complex Networks (CS60078). Smartphone Computing & Applications (CS60009). Machine Learning (CS60050). Social Computing (CS60017). Information Retrieval (CS60092).
IT FORTE	**Programming Languages :** C, $C++$, Android Programming, Python. **Tools Extensively Used :** Android Studio, MATLAB, LaTeX. **Operating Systems :** Linux, Windows, Android. **ERP :** SAP CRM 7.0, SAP ISU. **DBMS :** Oracle 9i.