Soumyadeep Roy

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EDUCATION

Indian Institute of Technology Kharagpur, West Bengal, India

- Ph.D. Candidate in Computer Science and Engineering   Jan 2020 – Present
  - Thesis: Incorporating Domain Knowledge in Medical NLP Applications
  - Advisor: Prof. Niloy Ganguly and Prof. Shamik Sural
  - Focus areas: Natural Language Processing, Health Informatics, AI for Social Good.
  - Supported by Institute Ph.D. Fellowship.

- M.S. (Research) in Computer Science and Engineering   Jul 2017 – Nov 2019
  - Thesis: Computational Approaches for Online Reputation Monitoring [Modeling, Analysis and Recommendation]
  - Advisor: Prof. Niloy Ganguly and Prof. Shamik Sural
  - Cumulative GPA: 9.21 / 10.00 ; Thesis

Kalyani Government Engineering College, Kalyani, West Bengal, India

- B.Tech in Computer Science and Engineering   Jul 2013 – Jun 2017
  - Thesis : Understanding Email Interactivity and Predicting User Response to Email
  - Advisor: Dr. Kousik Dasgupta and Mr. Binay Gupta
  - Cumulative GPA: 8.61 / 10.00

RESEARCH EXPERIENCE

L3S Research Center, Leibniz University Hannover, Germany

- Research Associate in Leibniz AI Future Lab   Jan 2021 – Present

Indian Institute of Technology Kharagpur, West Bengal, India

- Senior Research Fellow in Dept. of Computer Science and Engineering   May 2019 – Dec 2019

- Junior Research Fellow in Dept. of Computer Science and Engineering   Jun 2017 – May 2019
  - Member of Complex Networks Research Group (CNeRG)

- Indian Academy of Sciences Summer Research Fellowship Programme   Jun 2016 – Jul 2016
  - Project: Anomaly Detection and Summarization of various Extreme Weather Events over Indian sub-continent
  - Guide: Prof. Sudeshna Sarkar, Dept. of Computer Science and Engineering
  - Technical Report, Code

Adobe Big Data Experience Lab, Bangalore, India

- Summer Research Internship   May 2018 – Jun 2018
  - Project: Predicting Brand Personality from Web Content
  - Mentors: Mr. Anandhavelu Natarajan, Dr. Niyati Chhaya

PUBLICATIONS

JOURNALS

[6] S. Roy, K. Rudra, S. Sural and N. Ganguly, "COMPACT: A COncept-based, Meta-Path and Aspect-driven Approach for Clinical Trial Search," to be submitted to *ACM Transactions on Computing for Healthcare* **Under Review**

[5] S. Roy, S. Sural, N. Chhaya, A. Natarajan and N. Ganguly, "An Integrated Approach for Improving Brand Consistency of Web Content: Modeling, Analysis and Recommendation," in *ACM Transactions on the Web (TWEB)*, 25 pages, Nov 2020.

CONFERENCES

[4] S. Roy, K. Rudra, N. Agrawal, S. Sural and N. Ganguly, "Towards an Aspect-Based Ranking Model for Clinical Trial Search," in *8th International Conference on Computational Data and Social Networks (CSoNet 2019)*, pp. 209 - 222, Ho Chi Minh City, Vietnam, Nov 2019. doi pdf code plus data slides

[3] S. Roy, N. Ganguly, S. Sural, N. Chhaya and A. Natarajan, "Understanding Brand Consistency from Web Content," in *Proceedings of the 10th ACM Conference on Web Science (WebSci 2019)*, pp. 245 - 253, Boston, MA, USA, Jul 2019.doi pdf, data, slides

[2] S. Roy, "Automated EBM-oriented Summarization of Active or Recruiting Clinical Trials," in the *10th International Conference on COMmunication Systems & NETworkS (COMSNETS 2018)*, 2 pages, Bangalore, India, Jan 2018. **Best Graduate Forum Presentation Award**

BOOK CHAPTER

[1] S. Roy, N. Pal, K. Dasgupta, and B. Gupta, "Understanding Email Interactivity and Predicting User Response to email," in *Methodologies and Application Issues of Contemporary Computing Framework (CICBA 2018)*, pp. 69 - 79, West Bengal, India, Jul 2018. doi pdf, code, slides

PROFESSIONAL ACTIVITIES (TALKS/ TRAVEL GRANTS/ REVIEWING)

- Performed the role of social media outreach and in-session volunteer for the Indian Symposium on Machine Learning, IndoML (online), held from December 16 to 18, 2020.
- Performed the role of *Subject Matter Expert* for the "Data Science and Machine Learning Track" of Pycon India 2020.
- Performed the role of PC member of ECML-PKDD 2020 Applied Data Science Track.
- Received the Student Travel Grant for attending CODS-COMAD 2020 held at the Indian School of Business, Hyderabad, India in January, 2020.
- Presented the ACM WebSci 2019 paper titled *Understanding Brand Consistency from Web Content* at the "Out-of-India Exhibition" track of India HCI 2019 held at the Indian School of Business, Hyderabad, India on November 1 to 3, 2019
- Received IIT Kharagpur's *Institute Travel Grant* and CNeRG Travel Grant, for attending ACM WebSci 2019 at Northeastern University, Boston, MA, United States on July 1 - 6, 2019.
- Presented poster in the 1st RBCDSAI Web Science Symposium held at IIT Madras, India on February 25 - 26, 2019

OTHER WORK EXPERIENCE

- Research Idea titled *Understanding Health Complaints on Reddit* selected for Spotlight presentation in Healthcare Track at up.AI Summit 2018, IIT Kharagpur.
- Solution selected for the problem *Monitoring Migratory Birds Population in India as an Indicator of Climate Change* in the Smart India Hackathon Grand Finale 2017 at Coimbatore, India
- Qualified for the ACM-ICPC Kharagpur Regionals in 2014 and Amritapuri Regionals in 2015, as a member of Team BreakThrough.
- Successfully performed the role of *CodeChef Campus Chapter Representative* of Kalyani Government Engineering College from 2015 to 2017. Co-founded the college programming club, KeyGEnCoders in March 2015 that is still running successfully for around 5 years; the programming awareness as well as participation have improved.

REFERENCES   Provided on request.

[CV compiled on 2021-04-02]