Atonu Ghosh

✉ atonughosh@outlook.com
📞 +91 9775517009 / +91 9933603363
📍 Ananda Bhawan Complex, Rangamati,
Midnapore, West Bengal, 721102, India

Employment History

27/10/2022 – Present	**Senior Research Fellow, Indian Institute of Technology Kharagpur** in MeitY sponsored project entitled "TribeConnect: Integrated Smart Tribal Eco-Platform – A Proof of Concept in Chhattisgarh".
22/10/2020 – 22/10/2022	**Junior Research Fellow, Indian Institute of Technology Kharagpur** in MeitY sponsored project entitled "TribeConnect: Integrated Smart Tribal Eco-Platform – A Proof of Concept in Chhattisgarh".

Education

2021 - Till Date	**Ph.D., Computer Science & Engineering**, Indian Institute of Technology Kharagpur.
2020	**Master of Technology, Computer Science & Engineering**, Maulana Abul Kalam Azad University of Technology (formerly WBUT). *8.93 / 10*
2017	**Bachelor of Technology, Computer Science & Engineering**, Institute of Engineering & Management, Kolkata. *7.71 / 10*
2014	**Diploma, Computer Science & Technology**, West Bengal State Council of Technical Education. *83.7%*
2009	**Secondary Examination**, Central Board of Secondary Education. *86%*

Patents

Filed

1. "A secured edge-based automated power control and communication system for legacy iot infrastructures," Indian Patent, File No.: 202131038016 dated 23/08/2021.

2. "A system for remote monitoring, actuation and data prediction," Indian Patent, File No.: 202231040824 dated 17/07/2022.

3. "Modularized iot-based on-demand ambulatory hospital recommender system," Indian Patent, File No.: 202231008007 dated 15/02/2022.

Research Publications

Journal Articles

1. **A. Ghosh**, S. Misra, V. Udutalapally, and D. Das, "Loraute: Routing messages in backhaul lora networks for underserved regions," *IEEE Internet of Things Journal*, pp. 1–1, 2023. 🔗 DOI: 10.1109/JIOT.2023.3281941.

2   **A. Ghosh**, S. Misra, and V. Udutalapally, "Multiobjective optimization and sensor correlation framework for iot data validation," *IEEE Sensors Journal*, vol. 22, no. 23, pp. 23 581–23 589, 2022. 🔗 DOI: `10.1109/JSEN.2022.3215993`.

3   **A. Ghosh**, A. Mukherjee, and S. Misra, "Sega: Secured edge gateway microservices architecture for iiot-based machine monitoring," *IEEE Transactions on Industrial Informatics*, vol. 18, no. 3, pp. 1949–1956, 2022. 🔗 DOI: `10.1109/TII.2021.3102158`.

4   **A. Ghosh**, R. Saha, and S. Misra, "Persistent service provisioning framework for iomt based emergency mobile healthcare units," *IEEE Journal of Biomedical and Health Informatics*, vol. 26, no. 12, pp. 5851–5858, 2022. 🔗 DOI: `10.1109/JBHI.2022.3172624`.

Conference Proceedings

1   **A. Ghosh**, D. De, and K. Majumder, "A systematic review of log-based cloud forensics," in *Inventive Computation and Information Technologies*, Singapore: Springer Singapore, 2021, pp. 333–347. 🔗 DOI: `10.1007/978-981-33-4305-4_26`.

2   **A. Ghosh**, K. Majumder, and D. De, "Android forensics using sleuth kit autopsy," in *Proceedings of the Sixth International Conference on Mathematics and Computing*, Singapore: Springer Singapore, 2021, pp. 297–308. 🔗 DOI: `10.1007/978-981-15-8061-1_24`.

3   **A. Ghosh**, "Intelligent appliances controller using raspberry pi," in *2016 IEEE 7th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, 2016, pp. 1–5. 🔗 DOI: `10.1109/IEMCON.2016.7746253`.

Book Chapters

1   **A. Ghosh**, K. Majumder, and D. De, "A systematic review of digital, cloud and iot forensics," in *The "Essence" of Network Security: An End-to-End Panorama*, Singapore: Springer Singapore, 2021, pp. 31–74, ISBN: 978-981-15-9317-8. 🔗 DOI: `10.1007/978-981-15-9317-8_2`.

Technical Skills

Solution Development	Full Stack IoT Software and Hardware, Condition Monitoring, Hands on Cloud & Edge.
Coding	Python, C, SQL.
Databases	MySQL, SQLite, InfluxDB.
Web Dev	Docker, Django, Web API, Html, css, JavaScript, Apache Web Server, NGINX.
Misc.	Academic research, Product architecting & development, Server and network configuration.

Miscellaneous Experience

Product Development

2020 - Present	**System Architect**, SensorDrops Networks Pvt. Ltd., Indian Institute of Technology Kharagpur.

References

Available on Request