

## DR. ARINDAM KARMAKAR

Assistant Professor  
Dept. of Computer Science and Engineering,  
Tezpur University,  
Sonitpur,  
Assam, India  
Pin- 784028  
Email: arindam@tezu.ernet.in

### Areas of Specialization

- Algorithms
- Computational Geometry

### Qualification

- Ph. D - ISI Kolkata
- MCA - North Bengal University

### Research Publications

#### Published in Journals:

- Binay Bhattacharya and Arijit Bishnu and Otfried Cheong and Sandip Das and Arindam Karmakar and Jack Snoeyink (2021). Computation of spatial skyline points. *Comput. Geom.*, 93, 101698.
- Jammigumpula Ajay and Avinandan Das and Binayak Dutta and Arindam Karmakar and Sasanka Roy and Navaneeta Saikia (2020). Problems on One Way Road Networks. *J. Graph Algorithms Appl.*, 24(3), 523–546.
- Binayak Dutta and Arindam Karmakar and Sasanka Roy (2020). Optimal facility location problem on polyhedral terrains using descending paths. *Theor. Comput. Sci.*, 847, 68–75.
- Aaman Shamsul Hussain and Sanjib Kumar Deka and Prakash Chauhan and Arindam Karmakar (2019). Throughput Optimization for Interference Aware Underlay CRN. *Wirel. Pers. Commun.*, 107(1), 325–340.
- Shobhanjana Kalita and Arindam Karmakar and Shyamanta M. Hazarika (2018). Efficient extraction of spatial relations for extended objects vis-à-vis human activity recognition in video. *Appl. Intell.*, 48(1), 204–219.
- Kaushik Mondal and Arindam Karmakar and Partha Sarathi Mandal (2016). Path planning algorithms for mobile anchors towards range-free localization. *J. Parallel Distributed Comput.*, 97, 35–46.
- Arindam Karmakar and Sandip Das and Subhas C. Nandy and Binay K. Bhattacharya (2013). Some variations on constrained minimum enclosing circle problem. *J. Comb. Optim.*, 25(2), 176–190.

- Sandip Banerjee and Bhargab B. Bhattacharya and Sandip Das and Arindam Karmakar and Anil Maheshwari and Sasanka Roy (2013). On the Construction of Generalized Voronoi Inverse of a Rectangular Tessellation *Trans. Comput. Sci.*, 20, 22–38.
- Joydeep Mukherjee and Priya Ranjan Sinha Mahapatra and Arindam Karmakar and Sandip Das (2013). Minimum-width rectangular annulus *Theor. Comput. Sci.*, 508, 74–80.
- Sasanka Roy and Arindam Karmakar and Sandip Das and Subhas C. Nandy (2009). Constrained minimum enclosing circle with center on a query line segment. *Comput. Geom.*, 42(6-7), 632–638.
- Arindam Karmakar and Sasanka Roy and Sandip Das (2008). Fast computation of smallest enclosing circle with center on a query line segment. *Inf. Process. Lett.*, 108(6), 343–346.

## Papers in Conference Proceedings

- Shobhanjana Kalita and Arindam Karmakar and Shyamanta M. Hazarika (2018). A Temporal Activity Graph Kernel for Human Activity Classification. In *ICVGIP 2018: 11th Indian Conference on Computer Vision, Graphics and Image Processing, Hyderabad, India, 18-22 December, 2018* (pp. 13:1–13:8). ACM.
- Jammigumpula Ajaykumar and Avinandan Das and Navaneeta Saikia and Arindam Karmakar (2016). Problems on One Way Road Networks. In *Proceedings of the 28th Canadian Conference on Computational Geometry, CCCG 2016, August 3-5, 2016, Simon Fraser University, Vancouver, British Columbia, Canada* (pp. 303–308). Simon Fraser University, Vancouver, British Columbia, Canada.
- Shobhanjana Kalita and Arindam Karmakar and Shyamanta M. Hazarika (2016). Comprehensive Representation and Efficient Extraction of Spatial Information for Human Activity Recognition from Video Data. In *Proceedings of International Conference on Computer Vision and Image Processing - CVIP 2016, Indian Institute of Technology Roorkee, February 26-28, 2016, Volume 2* (pp. 81–92). Springer.
- Kaushik Mondal and Arindam Karmakar and Partha Sarathi Mandal (2015). Path Planning Algorithm for Mobile Anchor in Connected Sensor Networks. In *Distributed Computing and Internet Technology - 11th International Conference, ICDCIT 2015, Bhubaneswar, India, February 5-8, 2015. Proceedings* (pp. 193–198). Springer.
- Sandip Banerjee and Bhargab B. Bhattacharya and Sandip Das and Arindam Karmakar and Anil Maheshwari and Sasanka Roy (2012). On the Construction of a Generalized Voronoi Inverse of a Rectangular Tessellation. In *Ninth International Symposium on Voronoi Diagrams in Science and Engineering, ISVD 2012, New Brunswick, NJ, USA, June 27-29, 2012* (pp. 132–137). IEEE Computer Society.
- Joydeep Mukherjee and Priya Ranjan Sinha Mahapatra and Arindam Karmakar and Sandip Das (2011). Minimum Width Rectangular Annulus. In *Frontiers in Algorithmics and Algorithmic Aspects in Information and Management - Joint International Conference, FAW-AAIM 2011, Jinhua, China, May 28-31, 2011. Proceedings* (pp. 364–374). Springer.
- Priya Ranjan Sinha Mahapatra and Arindam Karmakar and Sandip Das and Partha P. Goswami (2011). \emph{k}-Enclosing Axis-Parallel Square. In *Computational Science and*

*Its Applications - ICCSA 2011 - International Conference, Santander, Spain, June 20-23, 2011. Proceedings, Part III* (pp. 84–93). Springer.

- Arindam Karmakar and Sandip Das and Subhas C. Nandy and Binay K. Bhattacharya (2010). Some Variations on Constrained Minimum Enclosing Circle Problem. In *Combinatorial Optimization and Applications - 4th International Conference, COCOA 2010, Kailua-Kona, HI, USA, December 18-20, 2010, Proceedings, Part I* (pp. 354–368). Springer.
- Binay K. Bhattacharya and Arijit Bishnu and Otfried Cheong and Sandip Das and Arindam Karmakar and Jack Snoeyink (2010). Computation of Non-dominated Points Using Compact Voronoi Diagrams. In *WALCOM: Algorithms and Computation, 4th International Workshop, WALCOM 2010, Dhaka, Bangladesh, February 10-12, 2010. Proceedings* (pp. 82–93). Springer.
- Arindam Karmakar and Sasanka Roy and Sandip Das (2008). Guarding Exterior Region of a Simple Polygon. In *WALCOM: Algorithms and Computation, Second International Workshop, WALCOM 2008, Dhaka, Bangladesh, February 7-8, 2008* (pp. 100–110). Springer.
- Arindam Karmakar and Sasanka Roy and Sandip Das (2007). Fast Computation of Smallest Enclosing Circle with Center on a Query Line Segment. In *Proceedings of the 19th Annual Canadian Conference on Computational Geometry, CCCG 2007, August 20-22, 2007, Carleton University, Ottawa, Canada* (pp. 273–276). Carleton University, Ottawa, Canada.
- Sasanka Roy and Arindam Karmakar and Sandip Das and Subhas C. Nandy (2006). Constrained Minimum Enclosing Circle with Center on a Query Line Segment. In *Mathematical Foundations of Computer Science 2006, 31st International Symposium, MFCS 2006, Stará Lesná, Slovakia, August 28 September 1, 2006, Proceedings* (pp. 765–776). Springer.