

DEBARKA SENGUPTA

Assistant Professor

📍 IIIT Delhi

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🌐 www.debarka.com

Notable awards

- **Infosys spot award** –2007
- **INSPIRE Faculty Award** –2015

Select publications

- Srivastava, D., Iyer, A., Kumar, V., and **Sengupta, D.**, 2018. . CellAtlasSearch: A scalable search engine for single cells. **Nucleic Acids Research** (in press).
- Sinha, D., Kumar, A., Kumar, H., Bandyopadhyay, S., and **Sengupta, D.**, 2018. dropClust: Efficient clustering of ultra-large scRNA-seq data. **Nucleic Acids Research**, 46(6):e36. doi: 10.1093/nar/gky007.
- Li, H., Curtois, E.T., **Sengupta, D.**, Tan, ..., and Prbhakar, S., 2017. Reference component analysis of single-cell transcriptomes elucidates cellular heterogeneity in human colorectal tumors. **Nature Genetics**, doi:10.1038/ng.3818.
- Cima, I., Kong, S.L., **Sengupta, D.**, Tan, I.B., Phyo, W.M., Lee, D., Hu, M., Iliescu, C., Alexander, I., Goh, W.L. and Rahmani, M., 2016. Tumor-derived circulating endothelial cell clusters in colorectal cancer. **Science Translational Medicine**, 8(345), pp.345ra89-345ra89.
- **Sengupta, D.**, Bandyopadhyay, S., and Sinha, D., 2016. A Scoring Scheme for Online Feature Selection: Simulating Model Performance Without Retraining. **IEEE TNNLS**, DOI: 10.1109/TNNLS.2016.2514270.
- Bandyopadhyay, S., Chowdhary, G. and **Sengupta, D.**, 2015. FOCs: Fast Overlapped Community Search. **IEEE TKDE**, 27(11), pp.2974-2985.

Core Competencies

- Machine learning
- Algorithms
- Statistics
- NLP
- C, Java, R, Matlab, Python
- Genomics
- Single cells
- Public health
- Health analytics

Professional Experience

2017 - Now **Assistant Professor**

IIIT - Delhi

- Jointly affiliated by the Dept. of Comp. Sc. and Eng. (CSE) & Centre for Comp. Biol. (CB)
- Currently I am teaching Algorithms to second year B. Tech. CSE students as well as first year M. Tech. CB students

2018 - Now **Advisor - Data Science**

Circle of Life Healthcare Pvt. Ltd. - Delhi

Lead a 10 member data science team

2016 - 2016 **INSPIRE Assistant Professor**

Indian Statistical Institute - Kolkata

Taught Data Structure to M. Tech. QROR students

2014 - 2016 **Postdoc**

Genome Institute of Singapore - Singapore

Contributed in major projects on single cell genomics and liquid biopsy

2013 - 2013 **Senior Data Scientist**

Corecompete Pvt. Ltd.

Worked on various machine learning based modelling tasks

2007 - 2009 **Systems Engineer**

IBM India Pvt. Ltd.

Worked on various SAP projects

2006 - 2007 **Software Engineer**

Infosys Technologies Ltd.

Worked on various SAP projects

Education

2009 - 2013 **Ph.D. in computer science and engineering**

Indian Statistical Institute

- SGPA 9.25
- Degree awarded by Jadavpur University

2002 - 2006 **B. Tech. in computer science and engineering**

West Bengal University of Technology

DGPA 7.29