

# Aniket Chakrabarti

## CONTACT INFORMATION

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## PROFESSIONAL EXPERIENCE

*Applied Scientist 2, Microsoft AI & Research, August, 2017 - current*

- Working on Question Answering systems based on Deep Learning

*Summer Research Intern, Microsoft Research, May to August, 2016*

Mentors: Dr. Kathryn McKinley, Dr. Sameh Elnikety, Dr. Yuxiong He

- Worked on distributed clock synchronization protocol for windows
- Used C++, C# and Python

*Summer Research Intern, NEC Labs, May to August, 2015*

Mentors: Dr. Srimat Chakradhar, Dr. Ming Feng, Mr. Kunal Rao

- Worked on efficient face tracking using face detectors and optical flow
- Used C++, Python and the OpenCV framework

*Research Associate Intern, HP Labs, May to August, 2014*

Mentors: Dr. Manish Marwah, Dr. Martin Arlitt

- Worked on anomaly detection on sensor data using belief propagation based approach on Markov Random Field
- Used C++, Python and the GraphLab framework
- Work resulted in a publication

*Graduate Research Associate, The Ohio State University, September, 2011 to August, 2017*

Mentors: Dr. Srinivasan Parthasarathy, Dr. Christopher Stewart

- Worked on machine learning techniques including kernel learning, probabilistic graphical models, approximate similarity search.
- Worked on scaling machine learning algorithms using parallel and distributed frameworks.
- Used C++, Python, MPI, OpenMp, Redis, Cassandra, Zookeeper and Hadoop systems

*Software Development Engineer, Amazon.com, 2010 to 2011*

- Developed web services for financial applications, including Java back ends and front ends in Perl Mason
- Deployed and configured the services across many host machines.

*Senior Engineer, Interra Systems, 2007 to 2010*

- Worked on parsers for the EDA formats such as Common and Unified Power Formats
- Used C, C++, Lex, Yacc, and TCL

## EDUCATION

**PhD**, Computer Science and Engineering

The Ohio State University, Columbus, USA

2011 - 2017

Advisors: Dr. Srinivasan Parthasarathy, Dr. Christopher Stewart

**MS**, Computer Science and Engineering

The Ohio State University, Columbus, USA

2011 - 2015

GPA: 3.975/4.0

**BE**, Information Technology

Jadavpur University, Kolkata, India

2003 - 2007

GPA: 9.15/10.0

## SKILLS

**Languages:** C,C++,Python, Matlab

**Frameworks:** Hadoop, Redis, Cassandra, Zookeeper, GraphLab, MPI, OpenMP, TensorFlow

## PUBLICATIONS

1. *A Pareto Framework for Data Analytics on Heterogeneous Systems: Implications for Green Energy Usage and Performance*. Aniket Chakrabarti, Srinivasan Parthasarathy, Christopher Stewart. ICPP 2017.
2. *Hierarchical Change Point Detection on Dynamic Networks*. Yu Wang, Aniket Chakrabarti, David Sivakoff, Srinivasan Parthasarathy. WebSci 2017.
3. *Fast Change Point Detection on Dynamic Social Networks*. Yu Wang, Aniket Chakrabarti, David Sivakoff, Srinivasan Parthasarathy. IJCAI 2017.
4. *D-STHARK: Evaluating Dynamic Scheduling of Tasks in Hybrid Simulated Architectures*. Svyo Toledo, Danilo Melo, Guilherme Andrade, Fernando Mouro, Aniket Chakrabarti, Renato Ferreira, Srinivasan Parthasarathy, Leonardo Rocha. ICCS 2016.
5. *Robust Anomaly Detection for Large-scale Sensor Data*. Aniket Chakrabarti, Manish Marwah, Martin Arlitt. ACM BuildSys 2016.
6. *Topological Graph Sketching for Incremental and Scalable Analytics*. Bortik Bandyopadhyay, David Fuhry, Aniket Chakrabarti and Srinivasan Parthasarathy. CIKM 2016.
7. *Improving Locality Sensitive Hashing Based Similarity Search and Estimation for Kernels*. Aniket Chakrabarti, Bortik Bandyopadhyay and Srinivasan Parthasarathy. ECML/PKDD 2016.
8. *Heterogeneity- and Green- Aware Partitioning for Data Analytics*. Aniket Chakrabarti, Srinivasan Parthasarathy and Christopher Stewart. Infocom Workshops 2016.
9. *A Bayesian Perspective on Locality Sensitive Hashing with Extensions for Kernel Methods*. Aniket Chakrabarti, Venu Satuluri, Atreya Srivathsan and Srinivasan Parthasarathy. TKDD 2015.
10. *Sequential Hypothesis Tests for Adaptive Locality Sensitive Hashing*. Aniket Chakrabarti and Srinivasan Parthasarathy. WWW 2015.
11. *Zoolander: Efficiently meeting very strict, low-latency slos*. Christopher Stewart, Aniket Chakrabarti and Rean Griffith. ICAC 2013.
12. *Zoolander: Efficient Latency Management in NoSQL Stores*. Aniket Chakrabarti, Christopher Stewart, Daiyi Yang and Rean Griffith. Poster, Middleware 2012.

## TEACHING EXPERIENCE

*Graduate Teaching Associate, The Ohio State University*

- Instructor for undergraduate courses on C and C++ programming
- Grader for undergraduate course on introduction to computing technology

*Guest Faculty, Jadavpur University*

- Lab instructor for windows programming lab on GUI development using Gimp Tool Kit
- Lab instructor for system programming lab

## PROFESSIONAL SERVICES

**Journal Editorial Board:** DMKD

**Program Committee Member:** WWW 2017, CIKM 2017, 2018, KDD 2018, SISAP 2018, DSAA 2018, SmartGrid 2018

**Reviewer:** ECML/PKDD, TKDE, TKDD, Pattern Recognition Letters, DAPD

## HONORS

- B. Chandrasekaran & Sandra Mamrak Graduate Research Award, Computer Science & Engineering, The Ohio State University, 2017
- SDM 16 Student Travel Grant
- SDM 14 Student Travel Grant
- SOSP 13 Student Travel Grant
- Best student project award for “Digital Image Watermarking Based on the Vector Quantization Technique”, Jadavpur University, 2007