

Swapnil Gandhi

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EDUCATION	M.Tech. (Research), Computer and Data Systems (CDS-CS) Indian Institute of Science (IISc) Advisor: Prof. Yogesh Simmhan Thesis: Distributed Programming Abstraction for Scalable Processing of Temporal Graphs	Aug 2017 – Jan 2020
	B.Tech., Computer Engineering Bharati Vidyapeeth, Pune Department Honors and Gold Medalist	Jul 2010 – Jun 2014
PUBLICATIONS	[Papers & Posters available here .]	
	PEER-REVIEWED CONFERENCES	
	[1] Swapnil Gandhi , Anand Padmanabha Iyer, “P ³ : Distributed Deep Graph Learning at Scale”, <i>(To appear) In proceedings of the 15th USENIX Symposium on Operating Systems Design and Implementation (OSDI 2021)</i> , Jul 2021. Acceptance Rate: $31/165 = 18.78\%$	
	[2] Swapnil Gandhi , Yogesh Simmhan, “An Interval-centric Model for Distributed Computing over Temporal Graphs”, <i>In proceedings of the 36th IEEE International Conference on Data Engineering (ICDE 2020)</i> , Dallas, Texas, April 2020. Acceptance Rate: $129/568 = 22.71\%$	
	PEER-REVIEWED POSTERS	
	[1] Swapnil Gandhi , “Wave: A Substrate for Distributed Incremental Graph Processing on Commodity Clusters”, 2 nd ACM Student Research Competition (SRC) at 27 th Symposium on Operating Systems Principles (SRC- SOSP 2019), Ontario, Canada, Oct 2019. Received Bronze Medal, Student Research Competition (Graduate Category)	
	[2] Swapnil Gandhi , Sayandip Sarkar, Abhilash Sharma, Yogesh Simmhan, “Distributed Querying over Compressed Property Graphs”, <i>Student Research Symposium</i> at 24 th IEEE International Conference on High Performance Computing, Data and Analytics (HiPC 2017), Jaipur, India, Dec 2017. Received Best Student Research Symposium Poster	
AWARDS & HONORS	Selected to participate in The Cornell, Maryland, Max Planck Pre-doctoral Research School (CMMRS) 2020, Saarbrücken, Germany	Aug 2020
	Bronze Medal, 2 nd ACM Student Research Competition (Graduate Category), at SOSP For “Wave: A Substrate for Distributed Incremental Graph Processing on Commodity Clusters”.	Oct 2019
	Won 12 th IEEE International TCSC Scalable Computing (SCALE) Challenge For “Dynamic Scaling of Video Analytics for Wide-area Tracking in Urban Spaces”.	May 2019
	Best Poster Award, 10 th EECS Research Students Symposium, IISc Bangalore For “Distributed Processing Model For Temporal Graphs”.	Apr 2019
	Invited to attend 3 rd RIKEN R-CCS HPC Youth Workshop, Kobe, Japan	Feb 2019
	Best Student Research Symposium Poster, IEEE HiPC, Jaipur, India For “Distributed Querying over Compressed Property Graphs”.	Dec 2017
	Department Honors, Bharati Vidyapeeth, Pune For outstanding academic performance (Batch 2010 – 2014).	Jun 2014
	TCS Popular Student Project, Bharati Vidyapeeth, Pune For “Mutation Testing Tool for C Programs”, Bachelors dissertation.	May 2014

Best Undergraduate Project Award, TRDDC Annual Students Day, Pune
For “Mutation Testing Tool for C Programs”, Bachelors dissertation.

Apr 2014

**WORK
EXPERIENCE**

Research Intern, **Microsoft Research India**

Sep 2020 – Mar 2021

Mentor: Dr. Anand Iyer

Worked on systems that enable efficient machine learning over large graphs.

Research Intern, **Microsoft Research India**

Mar 2020 – Aug 2020

Mentors: Dr. Bhargav Gulavani, Dr. Karthik Ramachandra

Worked on investigating and overcoming performance regressions in scalar UDF inlined queries. My work was later incorporated in SQL Server.

Operations Engineer, **PubMatic India**

Jun 2014 – Jul 2016

Manager: Kunal Kuntalam

Worked on reporting and ad-hoc data processing pipeline using combination of Apache Spark, Storm, Hadoop, Hive, and Pig Latin.

Research Intern, **TATA Research Development and Design Centre India**

Sep 2013 – Apr 2014

Mentors: Prasad Bokil, Ulka Shrotri, and R. Venkatesh

Worked on investigating and prototyping Mutation Testing Tool for C Programs.

SERVICE

Shadow PC External Review Committee Member, ACM EuroSys 2021

Oct 2020

Artifact Evaluation Committee (AEC) Member, USENIX OSDI 2020

Aug 2020

Artifact Evaluation Committee (AEC) Member, ACM ASPLOS 2020

Dec 2019

Artifact Evaluation Committee (AEC) Member, ACM SOSP 2019

Aug 2019

Treasurer and General Secretary for IISc ACM Student Chapter

Apr 2019 – Mar 2020

TEACHING

DS 256: Scalable Systems for Data Science, IISc

Jan 2019

Graduate Teaching Assistant for DS 256. Handled weekly discussion sections, homework assignments and helped with class projects (≈ 10 students).

E0 261: Database Management Systems, IISc

Oct 2018

Covered lecture on Google’s Spanner and Apache Giraph. (≈ 30 students).

**TECHNICAL
SKILLS**

Languages: C/C++, Java, Python

Data Platforms: Spark, Hadoop, Giraph, Storm

ML Tools: PyTorch, TensorFlow

REFERENCES

Available upon request.

[CV compiled on 2021-05-29]