Swapnil Gandhi

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EDUCATION

Indian Institute of Science, Bangalore

Aug 2017 – Jan 2020

- M.Tech (Research), Department of Computational and Data Sciences (CDS)
- Advisor: Prof. Yogesh Simmhan
- Thesis: Distributed Programming Abstraction for Scalable Processing of Temporal Graphs
- CGPA: 9.2 / 10.0 (Ranked 1st)

Selected coursework: Scalable Systems for Data Science, Topics in Database Systems, Database Management Systems, Linear Algebra and Applications, Introduction to Scalable Systems.

Bharati Vidyapeeth, Pune

Jul 2010 - Jun 2014

- B.Tech in Computer Engineering
- Thesis: Mutation Testing Tool for C Programs
- Graduated with Department Honors

WORK & RESEARCH EXPERIENCE

Research Intern, Microsoft Research, India

Mar 2020 - Present

 I currently collaborate with Bhargav Gulavani and Karthik Ramachandra on Scalar UDF Inlining in SQL Server.

Operations Engineer, PubMatic, India

Jun 2014 – Jul 2016

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

Research Intern, TATA Research Development and Design Centre, India

Sep 2013 – Apr 2014

Apr 2020

Worked under the mentorship of Prasad Bokil, Ulka Shrotri, and R. Venkatesh on building Mutation Testing Tool for C Programs.

PUBLICATIONS

[Papers & Posters available here.]

CONFERENCES

[1] <u>S. Gandhi</u>, and Y. Simmhan, "An Interval-centric Model for Distributed Computing over Temporal Graphs", 2020 IEEE 36th International Conference on Data Engineering (ICDE), Dallas, Texas.

POSTERS

- [1] <u>S. Gandhi</u>, "Wave: A Substrate for Distributed Incremental Graph Processing on Commodity Clusters", ACM *Student Research Competition* (SRC) at 27th Symposium on Operating Systems Principles (SOSP), Ontario, Canada, Oct 2019.
- [2] <u>S. Gandhi</u>, S. Sarkar, A. Sharma, and Y. Simmhan, "Distributed Querying over Compressed Property Graphs", *Student Research Symposium* at 24th IEEE International Conference on High Performance Computing, Data and Analytics (HiPC), Jaipur, India, Dec 2017.

AWARDS & FELLOWSHIPS

- Selected to participate in The Cornell, Maryland, Max Planck Pre-doctoral Research School (CMMRS) 2020.
- Bronze Medal, ACM Student Research Competition (Graduate Category), at 27th Symposium on Operating Systems Principles (SOSP) in Ontario, Canada.
- Won 12th IEEE International TCSC Scalable Computing (SCALE) Challenge
 For "Dynamic Scaling of Video Analytics for Wide-area Tracking in Urban Spaces".
- Best Poster Award, EECS Research Students Symposium, IISc Bangalore
 For "Distributed Processing Model For Temporal Graphs" at the 10th EECS Research Students Symposium.
- Invited to attend 3rd 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".
- Department Honors, Bharati Vidyapeeth, Pune
 For outstanding academic performance (Batch 2010 2014).

 Jun 2014

	 TCS Popular Student Project, Bharati Vidyapeeth, Pune 	May 2014
	 Best Undergraduate Project Award, TRDDC Annual Students Day, Pune For "Mutation Testing Tool for C Programs". 	Apr 2014
SERVICE &	 Artifact Evaluation Committee (AEC) member for ASPLOS 2020 	Dec 2019
LEADERSHIP	 Artifact Evaluation Committee (AEC) member for SOSP 2019 	Aug 2019
	 Treasurer and General Secretary for IISc ACM Student Chapter 	Apr 2019 – Mar 2020
	 Web Chair, Doctoral Symposium ICDCN 2019, Bangalore 	Aug 2018
TEACHING & LECTURES	■ Graduate Teaching Assistant, Indian Institute of Science TA for DS 256: Scalable Systems for Data Science with Prof. Yogesh Simmhan. Handled weekly discussion sections, homework assignments and helped with class projects (≈ 10 students).	
	■ E0 261: Database Management Systems	Oct 2018
	Covered lecture on Google's Spanner and Apache Giraph. (≈ 30 students).	
TRAVEL GRANTS	SOSP'19, HiPC'19, COMAD'19, HiPC'18, HiPC'17	
REFERENCES	Available upon request.	
	[CV compiled on 2020-03-31]	