Swapnil Gandhi

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EDUCATION

Indian Institute of Science, Bangalore — Aug 2017- Present

- M.Tech (Research), Department of Computational and Data Sciences (CDS)
- Advisor: Dr. Yogesh Simmhan
- 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
- Graduated with Department Honors
  - Course-Work Grade: First Class with Distinction (Highest attainable grade)
  - Thesis : Mutation Testing Tool for C Programs

PUBLICATIONS

[Papers & Posters available here.]

CONFERENCES

[1] S. Gandhi, 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] S. Gandhi, "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] S. Gandhi, and Y. Simmhan, "From 'Think Like a Vertex' to 'Think Like an Interval' ", *Young Researcher's Symposium* at ACM India Joint International Conference on Data Science and Management of Data (6th ACM IKDD CoDS and 24th COMAD), Kolkata, India, Jan 2019.

[3] S. Gandhi, 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

- Bronze Medal, ACM Student Research Competition (Graduate Category), at 27th Symposium on Operating Systems Principles (SOSP) in Ontario, Canada — Oct 2019
- Received a $1750 travel scholarship from ACM SIGOPS for attending the 27th ACM Symposium on Operating Systems Principles (SOSP) in Ontario, Canada — Aug 2019
- Won 12th IEEE International TCSC Scalable Computing (SCALE) Challenge — May 2019
  For "Dynamic Scaling of Video Analytics for Wide-area Tracking in Urban Spaces"
- Best Poster Award, EECS Research Students Symposium, IISc Bangalore, India — Apr 2019
  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 — Dec 2017
  For "Distributed Querying over Compressed Property Graphs"
- Department Honors, Bharati Vidyapeeth, Pune, India — Jun 2014
  For outstanding academic performance (Batch 2010 – 2014)
- TCS Popular Student Project, Bharati Vidyapeeth, Pune, India — May 2014
- Best Undergraduate Project Award, TRDDC, Pune, India — Apr 2014
  For "Mutation Testing Tool for C Programs" at TRDDC Annual Students Day

SERVICE & LEADERSHIP

- Artifact Evaluation Committee (AEC) member for ASPLOS 2020 — Dec 2019
- Artifact Evaluation Committee (AEC) member for SOSP 2019 — Aug 2019
- Treasurer and General Secretary for IISc ACM Student Chapter — Mar 2019 – Present
- Web Chair, Doctoral Symposium ICDCN 2019, Bangalore, India — Aug 2018

TEACHING & LECTURES

- Graduate Teaching Assistant, Indian Institute of Science — Jan 2019
  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)

RESEARCH EXPERIENCE

TATA Research Development and Design Center (TRDDC), India — Sep 2013 – Apr 2014

- Research Intern
  - Mentor: Prasad Bokil, Ulka Shrotri, and R. Venkatesh
  - Designed and implemented tool for generating and evaluating quality of structural test cases for C Programs

INDUSTRY EXPERIENCE

PubMatic, India — Jun 2014 – Jul 2016

- Operations Engineer
  - Worked on design, implementation and maintenance of reporting and ad-hoc data pipelines for processing terabytes of raw data flowing through PubMatic platform using Apache Spark, Storm, Hadoop, Hive, and Pig
  - Single Point-of Contact (SPOC) for monthly billing reconciliation/discrepancy and legacy reporting platform

REFERENCES

Available upon request

[*CV compiled on 2019-12-10*]