Swapnil Gandhi

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RESEARCH INTERESTS

Scalable temporal-graph processing, leveraging programmable dataplane switches and smart NICs to support data-intensive systems

EDUCATION

Indian Institute of Science, Bangalore, India
- Studying towards Masters in Computer and Data Systems — Aug 2017- Present
  - Cumulative GPA: 9.2 / 10.0 (Ranked 1st)

Bharati Vidyapeeth, Pune, India
- Bachelors in Computer Science and Engineering — Jul 2010 – Jun 2014
  - Graduated with Department Honors
  - Thesis : Mutation Testing Tool for C Programs

RESEARCH EXPERIENCE

Indian Institute of Science, Bangalore – Prof. Yogesh Simmhan — Aug 2017 – Present
- Design and implementation of distributed temporal graph processing system

TATA Research Development and Design Center, (TRDDC), India — Sep 2013 – Apr 2014
- Research Intern – Prasad Bokil, Researcher
  - Designed and implemented tool for generating and evaluating quality of structural test cases for C Programs.
  - Co-Supervisors: Ulka Shrotri, R. Venkatesh

PUBLICATIONS

POSTER

[1] S. Gandhi, and Y. Simmhan, "Wave : A Substrate for Distributed Incremental Graph Processing on Commodity Clusters", ACM *Student Research Competition* (SRC) at 27^{th} Symposium on Operating Systems Principles (SOSP'19), Ontario, Canada, Sep 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

- Received a $1750 travel scholarship from ACM SIGOPS for attending the 27^{th} 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, 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, HiPC, Jaipur, India — Dec 2017
- 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

TEACHING, LECTURES & SERVICE

- Artifact Evaluation Committee member for SOSP 2019 — Aug 2019
- DS 256: Scalable Systems for Data Science — Jan 2019
  As Teaching Assistant with Prof. Yogesh Simmhan
- E0 261: Database Management Systems — Oct 2018
  Lecture on Big Data Systems
- Web Chair, Doctoral Symposium ICDCN 2019, Bangalore, India — Aug 2018

[*CV compiled on 2019-09-05*]