Manasvini Sethuraman

msethuraman3@gatech.edu Manasvini Sethuraman https://Manasvini.github.io

Education

2019 – 2024 (Expected) **Ph.D. Computer Science** Georgia Institute of Technology
GPA: 3.86/4.00

2014 – 2016 **M.S. in Computer Science** Georgia Institute of Technology
GPA: 3.78/4

2010 – 2014 **B.E. Computer Science and Engineering** Anna University
GPA: 8.91 /10

Experience

2019 – Current **Graduate Research Assistant,** Georgia Tech.
- Working on projects related to bandwidth aware orchestration of applications at the edge of the network.

Summer 2023 **Ph.D. Software Engineering Intern** Google.
- Worked on adding dictionary based compression to allow small blocks in BigTable's on-disk data to be stored more efficiently.

2020, 2021 **Software Engineering Intern,** Bloomberg L.P.
- Designed a library to compare data from four Mutual Fund Holdings databases and publish results.
- Worked on financial named entity recognition for Equities Research.

2016 — 2019 **Software Developer,** Bloomberg L.P.
- Migrated existing company filings in several local *Oracle* databases to a single cluster configuration in *PostgreSQL*.
- Built a pub/sub system to ensure cache coherence across machines when a user's privileges are updated on one machine.

Summer 2015 **Technical Intern,** Yahoo! Inc.
- Worked on load testing and performance measurement of Ads API's using *Gatling*.
- Constructed a pipeline to log and visualize the performance of Ads UI using *Splunk dashboards*.

Skills

Coding C++, Python, Go

Tools/Libraries GTest, Pandas, gRPC, Kubernetes

Languages English, Tamil, Hindi.

Publications

1. M. Sethuraman, Z. S. Bischof, and A. Dainotti, "Towards Improving Outage Detection with Multiple Probing Protocols," in *Passive and Active Measurement 2024 (to appear)'*, 2024.

2. M. Sethuraman, Z. S. Bischof, and A. Dainotti, "Poster: Analysis of IPv4 Address Space Utilization with ANT ISI dataset and Censys," in *ACM Internet Measurement Conference (IMC '22)*, 2022. DOI: 10.1145/3517745.3563018.

3. M. Sethuraman, A. Sarma, A. Bauskar, A. Dhekne, and U. Ramachandran, "Clairvoyantedge: Prescient prefetching of on-demand video at the edge of the network," in *IEEE/ACM 7th Symposium on Edge Computing (SEC'22)*, 2022. DOI: 10.1109/SEC54971.2022.00010.

4. M. Sethuraman, A. Sarma, A. Dhekne, and U. Ramachandran, "Foresight: Planning for Spatial and Temporal Variations in Bandwidth for Streaming Services on Mobile Devices," in *12th ACM Multimedia Systems Conference (MMSys '21)*, 2021. DOI: 10.1145/3458305.3463384.

5. M. Sethuraman, R. E. Grinter, and E. Zegura, "Poster: Approaches to Understanding Indigenous Content Production on Wikipedia," in *3rd ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS '20)*, 2020. DOI: 10.1145/3378393.3402249.

Teaching

Fall '22, 2020 — **Teaching Assistant,** Advanced Operating Systems (CS6210)

Spring '16 — **Teaching Assistant,** Machine Learning (CS7641/CS4641)

Fall '15 — **Teaching Assistant,** Computability and Algorithms (CS6505)

Achievements

2011—2014 — **Merit Scholarship**, For outstanding academic performance

2015 — **Winner, Yahoo! Hackday**, For building an Android application to display information about cities appearing in email text