KANISHAK VAIDYA

Address: B Block, IISc Bangalore, Bengaluru, Karnataka. 560012

E-mail: kanishakvaidya@gmail.com **Website:** kanishakvaidya.github.io/phd-progress/

Academic Achievements and Scholarships

- Granted **PMRF**: January 2020
- GATE (EC) 2018: **AIR 10. GATE Score: 1000**
- **Junior Mathematical Olympiad:** 2011. AIR 30

Professional Skills

- Research and analysis
- Teaching and mentoring
- Scientific writing
- Critical thinking

Technical Strengths

- **Programming:** C/C++, Python, Octave/MATLAB, Bash scripting
- **Software Tools:** Proteus, LabView, Arduino IDE, SimuLink
- **Miscellaneous:** Linux, SSH, git, LaTeX, Markdown/Pandoc, vim, emacs

Industrial Experience

- **BSNL Mandi:** 45 Day industrial training on *telephone exchange*, *main distribution frames* and *switching*.
- **RWIT:** Workshop on wireless technologies, IoT and 5G
- **INMOTC:** KV Dhaula Kuan, Delhi. Focus on Complex analysis, Number theory and geometry

ABOUT ME

As a Ph.D. fellow in the Electrical Communication Engineering department at IISc Bangalore, I specialize in private information retrieval, cache-aided networks, and distributed systems. My research is focused on addressing privacy concerns in distributed systems and developing new techniques for straggler mitigation. I have a strong background in coding, signal processing, and information theory and I have also worked on image processing and computer vision projects.

EDUCATION

PhD, M.Tech	IISc Bangalore	Aug 2018 - Present	CGPA: 8.9/10
B.Tech	JNGEC Sundernagar	Aug 2013 - Jul 2017	69.4%
10+2	Kendriya Vidyalaya Mandi	2012-13	85.4%
Matriculation	Kendriya Vidyalaya Mandi	2010-11	CGPA: 9.2/10

RECENT PUBLICATIONS

- Kanishak Vaidya and B. Sundar Rajan, ``**Cache-Aided Multi-User Private Information Retrieval Using PDAs,''** 2023 IEEE Information Theory Workshop (ITW), Saint-Malo, France, 23-28 April 2023.
- Kanishak Vaidya and B. Sundar Rajan, ``**Private Information Delivery with Coded Storage,''** 2022 - 2022 IEEE International Symposium on Information Theory (ISIT 2022), Espoo, Finland, 24 June – 2 July 2022.
- Kanishak Vaidya and B. Sundar Rajan, ``**Cache-Aided Multi-Access Multi-User Private Information Retrieval,''** 2022 20th International Symposium on Modeling and Optimization in Mobile, Ad hoc, and Wireless Networks (WiOpt), Torino, Italy, 2022, pp. 246-253, doi: 10.23919/WiOpt56218.2022.9930597.
- **Other publications**: kanishakvaidya.github.io/phd-progress/publications

PROJECTS

- Image segmentation using watershed transform
- Image mosaic using homography estimation
- **Hobby projects:** Linux distribution and package repositories
- **Other projects:** kanishakvaidya.github.io/phd-progress/projects