Name: **Dr. Sachin Dattatraya Patil**

Designation: Assistant Professor

Email: sachindpatil@iiitsurat.ac.in

Professional Experience: (Total 4 years and 6 months)
-   Assistant Professor at Indian Institute of Information Technology Surat
-   from June 2021 – to Present
-   Assistant Professor at Computer Engineering Department, College of Engineering Pune from July 2019 – June 2021

Education:
-   PhD in Computer Science and Engineering from NITK, Surathkal
-   M.Tech in Computer Science and Engineering from VJTI, Mumbai
-   Bachelor of Engineering in Information Technology from Government College of Engineering, Karad

Research Interest:
-   Congestion Control and Avoidance, Active Queue Management (AQM), Internet of Things, TCP

Awards and Prizes:
-   GCI Mentor 2018
-   Reviewer for several journals and conferences
-   Resource person for several workshops on ns-2, IoT, Real-time testbed setup
-   GATE scholarship for M.Tech 2010 -12
-   PhD institute scholarship

Research Output:
-   Patil, Sachin D. and Mohit P. Tahiliani (2019). "Minstrel PIE: Curtailing queue delay in unresponsive traffic environments". In: Computer Communications 139, pp. 16–31.
-   Patil, Sachin D. and Mohit P. Tahiliani (2018), "Towards a better understanding and analysis of controlled delay (CoDel) algorithm by using fluid modeling". In: IET Networks, pp. 59–66.
-   Ramakrishnan, Gautam et al. "FQ-PIE Queue Discipline in the Linux Kernel: Design, Implementation and Challenges". In: 2019 IEEE 44th LCN Symposium on Emerging Topics in Networking (LCN Symposium). IEEE, pp. 117–124.
-   Patil, Sachin D. and Mohit P. Tahiliani, "On the robustness of AQM mechanisms against non-responsive traffic". In: IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), 2016. IEEE, pp. 1–6.
-   Kurode, Eesha et al. (2021) "MANET Routing Protocols with Emphasis on Zone Routing Protocol - an Overview" (2021). In: IEEE international conference of TENSYMP
-   S D Patil, P Mone, H Athalye, C Borse, DD Kshirsagar "Testbed based analysis of Linux queue disciplines over Internet traffic mix" Simulation Modelling Practice and Theory, 102601

Research Projects: (Open Source Contributions)
-   Implementation of FQ-PIE Queue Discipline in the Linux Kernel merged in Linux kernel v5.6 and selected in the top 10 features of Linux 5.6 (2020).
-   Alignment of PIE algorithm with RFC 8033 in the Linux Kernel merged in Linux kernel v5.1 (2019).

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