MAYANK RAMNANI

☐ +91-7999979933 | **□** phd2201101004@iiti.ac.in | **in** MayankRamnani

EDUCATION

Indian Institute of Technology Indore

Ph.D. in Computer Science and Engineering

Aug. 2022 - Present

CPI: 8.71/10

Shri G.S. Institute of Technology and Science, Indore

M.Engg. in Computer Science and Engineering

Aug. 2017 - Aug. 2021 CPI: 8.35/10

Lakshmi Narain College of Technology and Science, Bhopal

B.Engg. in Computer Science and Engineering

Aug. 2010 - Jul. 2014 CPI: 7.82/10

EXPERIENCE

Shri G.S. Institute of Technology and Science (SGSITS)

Sept. 2021 - June. 2022 Indore, India

Assistant Professor, Computer Science and Engineering

- Course coordinator and instructor for several UG and PG level courses.
- Courses taught: Concepts of OOP (using Java), C Programming, Android Development.

Indian Institute of Management (IIM) Indore

Academic Associate under Prof. Shubhamoy Dey (Information Systems Area)

Dec. 2019 - Sept. 2021 Indore, India

- Assisted Prof. Dey in subjects like Spreadsheet Modeling and Machine Learning.
- Curated course material, evaluated students and managed overall logistics for the courses.

Deloitte Support Services (Offices of the US, India)

Analyst - Global Technology Services

Jul. 2019 - Nov. 2019 Hyderabad, India

 Worked on Microsoft BI Stack for ETL/Data warehousing for Backend operations and maintenance activities for an in-house Dashboard based BI product used internally by Deloitte LLP and associated member firms.

Cognizant Technology Solutions (Pvt.) Ltd.

Software Test Analyst (Quality Engineering and Assurance)

May. 2015 - Jun. 2016 **Pune, India**

- Performed regression and timestamp testing to check the robustness of application functionalities.
- Actively involved in regular follow-ups with all the stakeholders.
- Coordinated with the onsite development team for timely resolution of issues.

InnoEye Technologies Software Engineer (Java) Oct. 2014 - Dec. 2014 Indore, India

- Incharge of Backend development using REST API, MySQL/MongoDB and Hibernate as ORM.
- Developed an application for an Indian Telecommunications Client for coordination among involved personnel.

PROJECTS

Developing a Network Digital Twin for virtualized RANs in 5G and Beyond Supervisor: Dr. Sidharth Sharma (Dept. of Computer Science and Engineering, IIT Indore)

June 2023 - Present

- working on creating a network digital twin (NDT) for the 5G network that interacts with the 5G network and captures data used to train AI/ML models running within the NDT.

- Working in phases, starting from designing an optimization framework for dynamic functional placement in vRANs.
- formulated the problem as an Integer Linear Programming framework to maximise service providers' profit by efficiently allocating virtualized network functions while ensuring optimal resource utilization and centralization levels.
- Saad Ahmed, Mayank Ramnani, Sidharth Sharma, "SliAvailRAN: Availability-Aware Slicing and Adaptive Function Placement in Virtualized RANs", submitted to International Conference On The Design Of Reliable Communication Networks (DRCN 2024) [Under Review].

RL based DVFS for Power Management in Multicore Systems

Jul. 2018 - Jun. 2021

Supervisor: Prof. D.A. Mehta (Dept. of Computer Engineering, SGSITS, Indore)

- Designed a framework to minimize power dissipation, without performance degradation of overall power saving.
- The framework takes as input task utilization, memory load, latency and read/ write access demands and provides optimal frequency to minimize dynamic power.
- Mayank Ramnani, D.A. Mehta, "Reinforcement Learning Based DVFS Framework for Power Management in Multicore Systems", Journal of Harbin Engineering University [Under Review].

Review Mining

Aug. 2013 - May 2014

Jun. 2012 - Dec. 2012

Supervisor: Mr. Nikesh Tiwari (Dept. of I.T., LNCTS, Bhopal)

 Developed a web portal with a Text Mining application for analyzing customer reviews of a car product based on keywords and impact parameters, producing accurate overall ratings.

Image Morphing

Supervisor: Mr. Atul Gupta (Dept. of I.T., LNCTS, Bhopal)

- Designed a reliable Image Morphing software application using J2SE Technology that takes source and destination images as inputs and morphs them using cross-dissolve technique to generate interpolated in-between images as the output(s).

EXTRACURRICULAR ACTIVITIES & ACHIEVEMENTS

- Student Placement Manager, Training and Placement Cell, IIT Indore, Nov. 2022 present
- Research Poster Presentation, Poster on "Data Driven Delay Estimation in 5G Virtualized RAN using Graph Neural Networks", PhD Summer School, TMA Conference 2023, Naples, Italy.
- Runner up, Doodle up, IIT Indore, Mar. 2023
- Winner, Speak India, IIM Indore, Jan. 2023
- Co-ordinator, Research Symposium, IIT Indore, Mar. 2023
- Runner up, Word Wars 3.0, Sep. 2022
- Runner up, Techno Samvad, IIT Indore, Sep. 2022