# Parnapalli Sarath Kumar

Third Year Undergraduate Statistics and Data Science 
 ♠ psarath22
 ♠ Sarath Kumar

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# **Academic Qualifications**

Year	Degree/Certificate	Institute	CPI/%
2022 - Present	B.S. SDS	Indian Institute of Technology, Kanpur	9.24/10
2022	Andhra Pradesh Board (XII)	Sri Chaitanya Boys Junior College, Vijayawada	98.3%
2020	Andhra Pradesh Board (X)	A P R School of Excellence, Kodigenahalli	98%

#### Scholastic Achievements

- Conferred with the Academic Excellence Award(twice) by IIT Kanpur for outstanding academic performance 2022-Present
- Achieved A\* grades in **Data Structures and Algorithms**, **Fundamentals of Computing I**, **Linear Algebra**, and **Engineering Graphics**, exemplifying exceptional performance
- Secured All India Rank 1827 in JEE Mains 2022, conducted by NTA among 1 million potential applicants
- Secured All India Rank 4337 in JEE Advanced 2022, standing out among 1.6 lakh shortlisted candidates nationwide 2022
- Secured Rank 198 in TS Engineering, Agriculture & Medical Common Entrance Test among 170K applicants 2022
- Secured Rank 247 in AP Engineering, Agriculture & Pharmacy Common Entrance Test among 200K applicants 2022

### Competitive Programming

- Competent in programming with maximum ratings: 1660 (expert) on Codeforces (SKumar)
- Secured a commendable global rank of 203 in Codeforces Round 950, surpassing 16,739 official participants

# **Key Projects**

• Decoding Boat Lifestyle | Course Project, Prof. Dootika Vats | MTH208 | •

- (July'23- Nov'23)
- Executed a Data Science project on **boat lifestyle** involving advanced **data cleaning and web scraping** in R and Python
- Developed an **interactive Shiny app** using consumer electronics data to enhance consumer decision-making efficiency
- Analyzed extensive consumer electronics data to uncover key trends, strategic pricing and marketing tactics at Boat Lifestyle
- Demonstrated expertise in data analysis and visualization, supporting well-informed decision-making processes
- Raga Detector | Self Project | View on Kaggle

(Feb'24-Mar'24)

- Engineered a neural network model for detecting Indian music ragas by leveraging deep learning techniques in Python
- Extracted Mel-Frequency Cepstral Coefficients and other essential features using librosa for precise data preprocessing
- Achieved a notable test accuracy of 94.1% through meticulous model training and evaluation using TensorFlow and Keras

#### Technical Skills

Programming Languages	Software and Libraries	Utilities and Tools
C, C++, Python, R	GGplot2, Tidyverse, Rvest, Dplyr, Pracma,	IATEX, AutoCAD, TensorFlow, SkLearn,
	Rcpp, Mass, Numpy, Pandas, Beautiful Soup	RStudio, Shiny, Profvis, Github, R Quarto

# Relevant Courses $A^*$ : Outstanding A: Excellent

Data Structures and Algorithms (A*)	Fundamentals of Computing - I (A*)	
Linear Algebra (A*)	Data Science Lab - I (A)	
Elementary Stochastic Processes - I (A)	Theory of Statistics (A)	
Introduction to Electronics (A)	Statistical Computing	
Introduction to Probability Theory	Machine Learning Specialization, Coursera	

# Positions of Responsibility

• Academic Mentor, ESC 111&112, Counselling Service - IIT Kanpur

(July'23-April'24)

- Spearheaded a team of 33 students in mentoring over 1200 peers through programming courses at IIT Kanpur
- Organized and delivered preparatory classes, offering proactive academic support to significantly elevate student performance

#### Extra-Curricular Activities

• Successfully completed a rigorous 10-day Naval Camp in August 2017, followed by an examination in 2018, leading to the prestigious attainment of an **A-grade NCC certificate**