SAMUDRANIL BASAK

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Date of birth: 7 August 1998

EDUCATION

MASTER OF SCIENCE | PONDICHERRY UNIVERSITY | PONDICHERRY, INDIA
November, 2020 – June, 2022
Statistics
CGPA: 9.75/10 (85.9%)

BACHELOR OF SCIENCE| ST. XAVIER'S COLLEGE, KOLKATA| KOLKATA, INDIA
July, 2016 – June, 2020
Statistics
CGPA: 6.397/10 (58.71%)

HIGH SCHOOL - ISC (12) | THE FRANK ANTHONY PUBLIC SCHOOL | KOLKATA, INDIA
2002 – 2016
Average Percentage: 92.75%

RESEARCH EXPERIENCE

RESEARCH UNDER PROF. (DR.) KARTHIK SHANKER
SINCE JANUARY, 2023

- Working on Simulation studies to determine whether tracking error for predators on a prey increase in mixed species groups of reef fish.

RESEARCH UNDER PROF. (DR.) ATANU BHATTACHARJEE
JANURY, 2022 – DECEMBER, 2023

- **Comparative Study of Stable Biomarker Selection**
  Comparatively studied Feature Selection Algorithms to select a subset of gene expression biomarkers from a set of 31,918 biomarkers of Squamous Cell Lung Carcinoma. Analysis of the selected biomarkers were done using the Proportional Hazards Model (with MLE and Bayesian Estimation) and the Accelerated Failure Time Model as an alternative.
- **Developing an interactive tool to show the survival probability of patients suffering from Angiogenesis.**
  Worked on an interactive software using **RShiny** to predict and show the probability of survivability of patients afflicted with Angiogenesis.

RESEARCH UNDER PROF. (DR.) SUDESH PUNDIR
MAY, 2021 – DECEMBER, 2021

- **Deriving Survival Functions for the Intervened Exponential Distribution.**

PUBLICATIONS

20 APRIL 2023

A. Bhattacharjee, S. Basak, P. Kumari (2023) "**A two-step feature selection procedure for relevant markers of Squamous Cell Lung Carcinoma using different survival models.**" In: Healthcare Analytics, Volume 3, 100168.

17 JANUARY 2023

J. Dey, S. Roy, S. Basak, S. Pundir (2023) **"Some Applications of the Intervened Exponential Distribution in Survival Analysis."** In: International Journal of Statistics and Reliability Engineering, Volume 9(3), pp. 353-363, 2022 (ISSN (P): 2350-0174; ISSN(O):2456-2378).

INTERESTS

Machine Learning, Applied Regression, Statistical Data Mining and Biostatistics

WORK EXPERIENCE

RESEARCH INTERN | INDIAN INSTITUTE OF SCIENCE | BANGALORE, INDIA
JANUARY 2023 – PRESENT
Working on Simulation studies to determine whether tracking error for predators on a prey increase in mixed species groups of reef fish.

ANALYST | IPSOS MMA| BANGALORE, INDIA
AUGUST, 2022 – NOVEMBER, 2022
Worked as an analyst at Ipsos MMA. Performing Market Mix Modelling in Retail. My responsibilities were:

- Understanding client requirements and business objectives.
- Improving marketing tactics by using Statistical modeling.
- Optimizing models to maximize ROI for the respective client.

PROJECT INTERN | TATA MEMORIAL CANCER RESEARCH INSTITUTE | NAVI MUMBAI, INDIA
JANUARY, 2022 – JUNE, 2022

- Applied Feature Selection methods to High-Dimensional gene expression data set to find relevant marker variables responsible for decrease in survival time in patients. Analyzed the variables using survival models.
- Worked on an interactive software using **RShiny** to predict and show the probability of survivability of patients afflicted with Angiogenesis.

ACADEMIC POSITIONS

PhD Student
JANURAY 2024 – PRESENT

Thesis Subject: Using Machine Learning to understand the impacts of water quality and habitat disturbances on fish community structure and patters in lower eat-himalayan streams of India and in La Moselle stream in France.

Thesis Director: Dr. Hoai Minh Le
Co-Supervisor: Dr. Baba Issa Camara

TECHNICAL SKILLS

PROGRAMMING LANGUAGES:
Advanced: RStudio, Python, MATLAB
Beginner: SAS

OTHER SOFTWARES:
Intermediate: MS Excel, SPSS

SCHOLARSHIPS RECEIVED

Merit Scholarship for Academic Performance, Pondicherry University (2022) **Rs. 25,000**

LINKS

LINKEDIN https://www.linkedin.com/in/samudranil-basak-6472691a7/
GOOGLE SCHOLAR https://scholar.google.com/citations?user=O3w8eWQAAAAJ&hl=en