

# Debartha Paul

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Department of Statistics  
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## EDUCATION

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Iowa State University, Ames *Aug'24-*  
**PhD in Statistics**

Presidency University, Kolkata *Sep'22-Jul'24*  
**M.Sc in Statistics**  
Notable courses taken: Probability Theory, Advanced Multivariate Analysis, Sample Survey, Advanced Statistical Computing, Bayesian Analysis and Nonparametric Inference among others

Presidency University, Kolkata *Aug'19-Jun'22*  
**B.Sc(Hons) in Statistics**  
Notable courses taken: Introduction to Probability, Linear Algebra, Statistical Computing, Mathematical Analysis, Design of Experiments, Inference and Stochastic Processes among others

## PROJECTS

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Probability-based Response-adaptive Allocation Design in Crossover Trials *supervised by Dr. Saurav De*

We propose to develop the allocation designs which are response-adaptive and also are based on probability in the case of crossover clinical trials. We also verify our allocation using simulation study and try find the tests for the equivalence of the treatments.

Submitted and verified as the Masters Dissertation at Presidency University, Kolkata. For simulation codes, head to [GitHub](#)

Some Problems on Dice, Their Mathematical Treatments and Simulations *with Ahel Kundu*

A throw of a die is probably one of the first experiments as we have learned in probability. The things we have learned are more theoretical than practical perspectives. To enlighten upon the practical aspect of this turn, we must bring in some verification to some generalized aspects and notions, mainly with the help of simulation. We know that each probabilistic problem has a journey on its own. We have tried our best to highlight most of it along with simulation and have tried to display a visualization of some engrossing features each problem consists of.

For the full simulations and workings, visit [GitHub](#). Published in [R-bloggers](#)

## EXPERIENCE

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MSA Labs *Apr'24 - Jun'24*

### **Data Science Intern**

The works assigned were mainly to prepare materials for Pharmacometrics. The job focussed on teaching Statistics to doctors with a focus on statistical computing and methodologies using The Julia Programming Language.

R Project Sprint, 2023 *30<sup>th</sup> Aug'23 - 1<sup>st</sup> Sep'23*

### **Open Source Contributor(Remote)**

Was selected to contribute to the base R along with other R core members. Mainly contributed to documentation fixes and translations for the language. [R Project Sprint, 2023 homepage](#)

GirlScript Summer of Code, 2023 *May'23 - Aug'23*

### **Open Source Contributor**

Developed and deployed machine learning models for analysis and predictions based on various datasets

## SKILLS

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<b>Programming</b>	R	C	Julia	C++	Python
<b>Softwares</b>	L <sup>A</sup> T <sub>E</sub> X	Excel	PowerPoint		
<b>Languages</b>	English	Bengali	Hindi		
<b>Personal</b>	Problem Solving	Analytical Thinking			

## ACHIEVEMENTS

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International Youth Math Challenge *2022 & 2023*  
**Finalist**  
Secured Silver Honour for both the years

## CONFERENCES

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R @ IISA2022 Workshop, IISc Bangalore *2022*