SURJA SANYAL

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2A, Hazi Zakaria Lane, Manicktala, Kolkata 700006, West Bengal, India

OBJECTIVE

To enhance and broaden my knowledge and contribute with the same to the scientific community and the society. To help nourish upcoming scientific brains and direct them towards better utilisation of their own capabilities.

EXPERIENCE

16/03/2011 - 19/09/2019

Tata Consultancy Services (TCS)
Bio-Statistical Programmer, Data Modeler, and Data Analyst

I have worked for a Danish pharma Client* in the Lifesciences domain as a SAS Bio-statistical programmer doing data analysis and interpretation to establish the safety and efficacy of upcoming drugs undergoing clinical trials in phases 1, 2, and 3.

I have also worked for an American Insurance Client* in the Healthcare industry for health related data modeling and trend prediction of US citizens.

* Names of the organizations have been omitted due to contractual obligations.

EDUCATION

2021 Onwards

Indian Institute of Technology Guwahati, Guwahati, Assam, India
Doctor of Philosophy - Computer Science and Engineering
PhD Course work: 8.75 / 10.00

2019 - 2021

National Institute of Technology Durgapur, Durgapur, West Bengal, India
Master of Technology - Computer Science and Engineering
9.28 / 10.00

2006 - 2010

University Institute of Technology, The University of Burdwan, Burdwan, West Bengal, India
Bachelor of Engineering - Computer Science and Engineering
79.9 %

2006

Kendriya Vidyalaya Number 1, Saltlake, Kolkata, West Bengal, India
CBSE AISSCE - Class XII
79.6 %

2004

Kendriya Vidyalaya Number 1, Saltlake, Kolkata, West Bengal, India
CBSE AISSE - Class X
82.8 %

PUBLICATIONS

A Game Theoretic Framework for Surplus Food Distribution in Smart Cities and Beyond

Citation: Sanyal, S., Kumar Singh, V., Xhafa, F., Sanyal, B. and Mukhopadhyay, S., 2021. A Game Theoretic Framework for Surplus Food Distribution in Smart Cities and Beyond. *Applied Sciences, 11*(11), p.5058.

Description: This is a research on surplus food distribution under strategic settings for established and upcoming smart cities. This is a relatively less researched topic around the globe and the open-source algorithm proposed for the same will hugely benefit current and upcoming food redistribution activities, provide core support to existing and future food communities, as well as, address the food insecurity and wastage issues of the world to an appreciably greater extent.

PROJECTS

Master's, 2021: A Game Theoretic Framework for Surplus Food Distribution in Smart Cities and Beyond

An algorithm was designed for the food redistribution systems under strategic settings for existing and upcoming smart cities. It addresses the food insecurity and wastage problem of the world by providing an open-source algorithm for the redistribution activities. This will benefit current such activities, and existing and upcoming food communities.

Bachelor's, 2010: Domain Specific Formal Method for Object Oriented Software Design
An object oriented core Java programming to develop a library software. This was developed keeping in mind the specific domain for which the software was to be designed, customising and fine-tuning it to meet the end objectives from the commencement of its life cycle. This software helped the users (librarians and members of the library) to efficiently issue, receive, return, and track books based on unique book Identity numbers. It also alerted the user of books issued for more than a predetermined issue period.

Bachelor's, June-July 2008: Electricity Bill Generation System using Java
We designed a GUI based software that accepts electricity units consumed from the customers and calculates outstanding electricity bill based on the unit charges for commercial or domestic meters from the providers' site. It also provided arrear calculation and print functionalities.

ACHIEVEMENTS

First Dan Black Belt in Shito-Ryu style Karate, recognised by the World Karate Federation (WKF), in December 2019.

Participated in several competitive and charitable running events during both my job as well as my academic tenures.

Received numerous On the Spot awards for outstanding individual contributions to the then projects during my tenure at TCS.

Received numerous CLP Faculty awards for distinguished contribution towards knowledge building of associates while in TCS.

Received several Service and Commitment awards for my persistent contributions to the organization during my tenure at TCS.

Received the Best Team of the Year award in all Delhi office locations in TCS in 2011.

Certified Swimmer recognized by the Swimming Federation of India in 2006.

Multiple performance awards and merit certificates in Maths and Science Olympiads during my schooling.

SKILLS & TOOLS

Programming Languages: Python3, Base and Advanced SAS, Linux, UNIX, VBA, SQL, LaTeX.

Tools and Frameworks: Jupyter, Spyder, IDLE, SAS University Edition, SAS Life Science Analytics Framework, Overleaf, TeX Studio, MS SQL Server, MS Excel, MS Word, Putty, Aginity Workbench, Data Transformer, MS Visual Basic.

LANGUAGES

Fluent in reading, writing, and speaking: English, Hindi, and Bengali.

Passed the TOEFL English language test held on January 30, 2021, securing 107 marks out of 120.

ACADEMIC INTERESTS

Game Theory, Machine Learning, Neural Networks, Artificial Intelligence, Smart devices, Internet of Things.

NON-ACADEMIC INTERESTS

Gathering Science and Technology knowledge, Martial Arts, Swimming, Volunteering for social activities, Football (soccer), Running short distances for group activity and charity, Table Tennis.

ABOUT ME

I am a team player with good leadership qualities, and a science and technology related knowledge seeker. I am a very active person and adapt to new settings and surroundings thereby getting productive very early. I learn fast, from anybody and everybody, often even by observation. New undone challenges attract my interest. I can always get tasks done. Being very punctual in nature, I strictly adhere to timelines. Interesting work makes me more enthusiastic and energetic about it. Time is never a factor when that happens. I have a knack to pleasantly surprise people by outperforming expectations.

REFERENCES

Dr. Manas Khatua - "Indian Institute of Technology Guwahati, Guwahati, Assam, India"
Assistant Professor, Department of Computer Science and Engineering
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Dr. Sajal Mukhopadhyay - "National Institute of Technology Durgapur, Durgapur, West Bengal, India"
Associate Professor, Department of Computer Science and Engineering
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