

AURGHYA MAITI

17C, Telipara Lane,
Dhakuria,
Kolkata, West Bengal
India - 700031

✉ aurghya@iitkgp.ac.in
🔗 github.com/aurghya
in [linkedin.com/in/aurghya/](https://www.linkedin.com/in/aurghya/)
☎ +91-9475316277

ACADEMIC DETAILS

Indian Institute of Technology Kharagpur

B.Tech in Computer Science and Engineering

CGPA: 9.76/10

Jul'16-Present

Nava Nalanda High School

Class XII, West Bengal Council of Higher Secondary Education

Score: 95.20%

May'14-May'16

Nava Nalanda High School

Class X, West Bengal Board of Secondary Education

Score: 96.71%

May'04-May'14

INTERNSHIP

Big Data Experience Lab, Adobe Inc., India

Research Intern

May'19-Jul'19

- Explored and implemented algorithms for the generation of Bayesian Networks from big data
- Designed and implemented efficient algorithms for the identification and localization of interventions
- Filing a patent "Causal Ranking of logged visit features responsible for significant shifts in web metrics" for the commercial application based on similar ideas

National Digital Library of India

Back-end Development Team

May'18-Jul'18

- Data extraction from XML, CSV, plaintext, web and compressed sources
- Developed modules for data correction, validation and Unit Testing of modules

PROJECTS

Intrinsic Reward For Multi-Agent Competitive Games With Diverse Configurations

Guide: Prof. Niloy Ganguly and Prof. Sourangshu Bhattacharya

Jul'19 - Present

- Designed a game environment, that captures a scenario where agents with different abilities have to cooperate with members of their team and compete with others to win
- Emergence of strategies for different players that are optimal under a given scenario
- Designing intrinsic motivation, such that the agent will be able to learn different optimal policies and adapt these strategies according to the requirement

Identifying friends and enemies in a Multi-Agent System

Guide: Prof. Niloy Ganguly

Jan'19 - Apr'19

- Finding friends and enemies may help in a scenario, where the role of other agents are unknown
- Emergence of friendly behavior towards the helping agent and antagonistic behavior towards the opponent agent in particular hidden role games

Question Generation from RDF graphs via Discriminative Ranking

Guide: Prof. Plaban Kumar Bhowmick

Jul'18 - Nov'18

- Identification of entities and their relations from the knowledge graph generated from RDF Linked Data
- Extraction of tokens from entities and relationships and generation of a ranked list of natural language questions using Discriminative Ranking

Identification of keyphrases, classification of identified keyphrases and extraction of relationship between two keyphrases

Guide: Prof. Plaban Kumar Bhowmick

Jun'18 - Dec'18

- Worked on the SemEval 2017 Task 10: Extracting Keyphrases and Relations from Scientific Publications
- Applied several baseline models including BiLSTM-CRF, CNN and attention-based BiLSTM and also an ensemble of several models to solve the task

Suggestion Mining From Online Reviews and Forums

- Applied several models for Text Classification including Statistical Classifiers, CNN, attention-based BiLSTM, Hierarchical Attention Network, and Graph Convolutional Network (GCN).
- Tried to overcome the problem of imbalance in the data and out-of-vocabulary words and used semi-supervised approaches, so that a large amount of unlabelled data could be used

PUBLICATIONS

- Gaurav Sinha, Ayush Chauhan, Aurghya Maiti, Naman Poddar and Pulkit Goel **Dis-entangling Mixture of Interventions on a Causal Bayesian Network Using Aggregate Observations** [PDF]
Accepted at the Ninth International Workshop on Statistical Relational AI at the 34th AAAI Conference on Artificial Intelligence (AAAI) 2020

SKILLS AND EXPERTISE

- **Languages** : C, C++, Java, Python, SQL
- **Libraries and Frameworks** : Pandas, Scikit Learn, Tensorflow, Keras, OpenCV, JUnit, Git, Java Applet
- **Skills** : Software Engineering, Machine Learning, basics of Image Processing, Database Management

RELEVANT COURSES

Algorithms-I, Algorithms-II, Probability and Statistics, Linear Algebra, Machine Learning, Knowledge Modelling and Semantic Technologies, Database Management System, Artificial Intelligence, Reinforcement Learning, Image Processing, Natural Language Processing

Online Courses (Coursera): Neural Networks and Deep Learning, Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization, Structuring Machine Learning Projects, Convolutional Neural Networks, Introduction to Deep Learning

CERTIFICATIONS

- **IEEE Certified Winter Workshop on Image Processing and Autonomous Robotics, IIT Kharagpur (2017):** Learned OpenCV, basics of micro-controllers and Arduino and applied them to make self-balancing robot and tracking robots in a video to compute the score achieved by them in a task

AWARDS AND ACHIEVEMENTS

- Rank 2 among 61 B.Tech students from Department of Computer Science and Engineering and Rank 5 among nearly 1334 fourth-year undergraduate students of the Institute
- Qualified for ACM-ICPC Asia Amritapuri Onsite Regionals 2018
- Selected for the KVPY Scholarship, a competitive fellowship awarded by the Department of Science and Technology, Government of India
- Achieved a position among the top 1% in the state in NSEP and was selected for INPhO
- Achieved overall rank 6 and District rank 1 in Class X Board Examination (West Bengal Board of Secondary Education) out of nearly 1 million students

EXTRA-CURRICULAR ACTIVITIES

- **National Service Scheme (NSS):** Involved in voluntary teaching activities for underprivileged children in neighboring villages
- **Content writing at National Digital Library:** Worked on solutions of JEE Advanced past year question papers for NDL Repository