

MRINAL TAK

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EDUCATION

Indian Institute of Technology, Guwahati

2013-2017

B.Tech in Computer Science & Engineering

GPA: 8.72

Thesis: Designing payment mechanism in Knapsack Auctions

Research Interests: Algorithm design, language modeling, deep learning

PROJECTS

Payment Mechanism in Knapsack Auctions

Bachelor Thesis

Guide: Prof. G. Sajith, Dept. of CSE

- Constructed Knapsack graph by reducing the knapsack problem to costliest path problem on a directed acyclic network.
- Devised a frugal mechanism for Knapsack Auctions, which minimizes the payments.
- By leveraging on the most optimal solution, minimised the payments being made to the agents to keep the mechanism incentive compatible.

Entropy: Language Model Based Readability Metric

2017

Guide: Prof. Ashish Anand, Dept. of CSE

Used Language Modeling approach to predict automated, fine-grained measure of readability.

Convolutional Neural Networks based Video Surveillance System

2016

Guide: Prof. Arijit Sur, Dept. of CSE

Used Hierarchical Convolutional features and Multi-Domain net, to build an object tracker.

EXPERIENCE

Goldman Sachs, Bangalore

Jan 2019- Current

- Working on Topic Modeling to determine abstract topics in documents.
- Proposing new approaches to improving search engine rankings.

Senior Analyst

Samsung Research, Bangalore

June 2017- Jan 2019

- Worked on fact checking and Question Answering system
- Created Calendar-360, a smart calendar based on Conversational Intelligence, using NLP techniques

Research Engineer

Hanyang University, Seoul, South Korea

June 2017- Jan 2019

- Research Project on General Type 2 Fuzzy Logic in Pattern recognition

Research Assistant

TECHNICAL SKILLS

Programming Languages

C++, Java, Python, C

Libraries and frameworks

Keras, Hadoop, Protobuf

Softwares

MATLAB, Visual Studio, IntelliJ, Android Studio, L^AT_EX

COURSES COMPLETED

- Algorithmic Game Theory
- Intelligent Systems & Interfaces
- Data Mining
- Computer Vision using Machine Learning
- Data structures
- Operating System
- Artificial Intelligence
- Algorithms
- Probability
- Database Management System

ACADEMIC ACHIEVEMENTS

IIT-JEE Advanced All India Rank- **954**

LEAN SIX SIGMA: Green Belt Certified

NSTSE (National Level Science Talent Search Exam) AIR-**32**

KVPY Scholarship exam All India Rank- **268**

POSITION OF RESPONSIBILITY

SENIOR EXECUTIVE, EDC - The Entrepreneurial Development Cell-IIT-Guwahati

ORGANIZER, UDGAM- The IIT Guwahati Entrepreneurship Summit

ORGANIZER, TECHNETHLON - The International School Championship