

PRAKHAR AGRAWAL

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prakhar0409

EXPERIENCE

Analyst

Goldman Sachs Services Pvt Ltd

June 2018 – Ongoing

Bengaluru, IN

- Reason about the emergent behavior/fault-modes of complex systems
- Use statistical literacy & code to solve issues with sub-linear no. of humans

Research Assistant

Aalto University (A!)

May 2016 – July 2016

Espoo, FI

- Estimated partial atomic charges on atoms using Graph Neural Network
- Parallelized training phase using MPI and genetic algorithm in C++

PROJECT WORK

Refining Index Storage in Graph DBs

Prof. Srikanta Bedathur

- Exploiting schema flexibility of graph databases to optimize Gremlin queries
- Introducing capabilities to store indexes as a layer in graph
- Designing performance benchmarks to highlight effect of these methods

Distributed Hash Table Simulator

Prof. Smruti Sarangi

prakhar0409/Pastry-Simulator

- Developed a DHT based system - Pastry (scales for > 1000 nodes)
- Robust support for smooth node joining & leaving from the network.

AI for the game of Tak

Prof. Mausam

prakhar0409/Playing-Tak

- Implemented a heuristic based Bot to play Tak using minimax search tree
- Training was done by tweaking weights of a copy & simulating their contest

HoH Labs

Prof. Sorav Bansal

- Implemented parts of **exo-kernel 'HoH'** conceptualized at IIT Delhi
- Added support for **fibers**, **coroutines** and **multiple cores** (2 cores)

Received a *letter of appreciation* for an excellent performance in the course

ACHIEVEMENTS

Hackathons & Competitions

- AI for Ed. Global HackWeek 2017: Winners of grand prize of \$6000; ReadEx is a personalized, assistive smart document reader; helps user gauge their understanding of the topic
 MayankR/OpenEdAI-Hackathon
- Adloid AR Hackathon, '16: Stood first for solving various challenge in AR
- Data Analytics Hackathon IIT Delhi, 2016: Winners for most accurately predicting Effect of Climate change on GDP of a country
- Runner up at Coding Blocks, RDV Hackathon. Developed BrainWhack, a directed learning app that uses LSI to tag & suggest pre-requisites topics
- Tryst Algorithms, 2016: Second Runner up at an algorithmic contest, IITD
- District Level Science Fair, Latur '11: Winners for a model on Life on Mar.
- State Level Basketball, Buldhana '08: Part of team from the Latur district.

EDUCATION

B.Tech in Computer Science

IIT Delhi

June 2014 – May 2018

New Delhi

CGPA: 9.255 / 10

Junior College

Narayana Junior College

June 2012 – May 2014

Hyderabad

Percentage: 97.8%

SCHOLASTIC

- All India Rank 64 in JEE Advanced, '14
- Received KVPY Fellowship Award, '14
- Awarded IITD Semester Merit (x 2)
- Topped with GPA 10.0 in semester 1

RELEVANT COURSE WORK

Advanced Distributed Computing
Natural Language Processing
Machine Learning, Computer Vision
High Speed Networks (Blockchains)
Optimization Theory
Artificial Intelligence
Database Management Systems
Operating Systems, Parallel Programming

PERSONAL INITIATIVES

A-paper-a-week

papers-I-read

read and summarize a paper every week

Teaching Assistant

Data-Structures-TAship

- currently a TA to Data Structures - one of the most sought after courses at IITD
- Co-designed two assignments and conducted doubt sessions for students

SKILLS

- Java, C++, Python, SML
- Distributed: Spark, HBase, Gremlin
- Blockchains: Ethereum

POSITIONS OF RESPONSIBILITY

System Administrator: working to maintain a reliable infrastructure at CSE, IITD

BSP & ACES-ACM, IIT Delhi: spearheaded teams of enthusiasts as technical lead, to promote a healthy & geeky environment in IITD fraternity