Arpan Mukherjee

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EDUCATION

IIIT DELHI
M.Tech | Computer Science
Jul 2019 | Delhi, IND
Thesis: Analyzing User Discussion Dynamics in Social Media Platforms

BIT KOLKATA
B.Tech | Information Technology
Jun 2016 | Kolkata, IND

COURSEWORK

Operating Systems
Data Structure & Programming
Database Management System
Object Oriented Programming
Algorithms Design & Complexity
Machine Learning
Advanced Machine Learning
Deep Learning
Natural Language Processing
Information Retrieval
Collaborative Filtering

AWARDS

2019	Recipient of **SIGIR** grant
2018	**44/3500**, ACM-ICPC Online
2018	**25/168**, ACM-ICPC Kanpur
2018	**37/268**, ACM-ICPC Amritapuri
2017	**97.9 Percentile**, GATE'17
2016	**1st**, IEM Coding Olympiad
2016	**2nd**, HackOn-101

SKILLS

Programming
Python • C/C++ • Java • LATEX • Shell • PHP • HTML • CSS

Tools and Libraries
PyTorch • Keras • TensorFlow • Scikit-Learn • Matplotlib • NumPy • Pandas • OpenCV • Git • Jupyter Notebook

POSITIONS

Teaching Assistant | 2019
Responsible for guiding students with tutorial problems for 4 courses.

Procon Event Head | 2018
Problem setter & tester of international coding event PROCON '18.

Technical Secretary | 2015
Responsible for organizing Bits2Bytes '15, Annual Techfest of BIT Kolkata.

EXPERIENCE

MICROSOFT | Software Engineer
Jun 2019 - Present | Bangalore, IND
- Currently working on Office 365 IDC team, engineer for **Outlook extensibility** platform for iOS add-in developers' community.

TATA CONSULTANCY SERVICES | Asst. Software Engineer
Aug 2016 - Jun 2017 | Kolkata, IND
- Worked on a **Django** based web application, where users can run simulations to observe how different components affect on new resultant alloy.

RESEARCH

LCS2, IIIT DELHI | Postgraduate Researcher
May 2018 - Jun 2019 | Delhi, IND
- Worked with **Prof. Tanmoy Chakraborty** to explore user-behaviour and conversation patterns on **Reddit** and how it led to conflict generation.
- We fused textual and network-based features together, which achieved an **AUC of 0.89**. Full paper accepted at **CIKM 2019**.

PROJECTS

CONTENTS | Educational Videos Content Tables Generator
- Built a content table generator for educational videos, which achieved **F1-macro 0.41** & **F1-micro 0.39**. Demo paper accepted at **SIGIR 2019**.

CAN YOU? | Detecting Semantic Similarity in Questions
- Built a system to detect similar questions on syntactic level using multiple models, achieved **82%(SOTA: 85%)** for **Quora** dataset.

HIGHLIGHTER | Summarization of Sporting Events using Tweets
- Built an **extractive summary** generator for any sporting events, using posted **tweets** during the event based on predefined hashtag filter.

FINISH-IT | Marathon Race Finish Time Predictor
- Built a system using **RNN** to suggest best race finish time for marathon runners based on previous marathon history.

ALUMNECT | Alumni Connect Portal
- Built an online community using **HCI** components based on iterative feedbacks. Used **Google API** to plot global density of students.

FMS | Facility and Management Service System
- Built a system using **Facebook Graph API** to assign employees to posted complaints, feedback & ratings by the user stored in the system.

PUBLICATIONS

[1] S. Dutta, G. Kaur, S. Mongia, A. Mukherjee, D. Das, and T. Chakraborty. Into the battlefield: Quantifying and modeling intra-community conflicts in online discussion. *Long paper, ACM CIKM*, 2019.

[2] A. Mukherjee, S. Tiwari, T. Chowdhury, and T. Chakraborty. Automatic curation of content tables for educational videos. *Demo Track, ACM SIGIR*, 2019.