Raktim Mitra

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LINKS

Github:// **timkartar**
LinkedIn:// **raktimmitra**
Visit My Site: Raktim Mitra

COURSEWORK

Introduction to ML (Ongoing)
Operating Systems (Ongoing)
Data Structure and Algorithms
Introduction to Computing
Computer Organisation
Linear Algebra and differential Equation
Discrete Mathematics
Introduction to Psychology
Principles of Biotechnology
Computing Laboratory
Functional Programming
Communication Skills
Quantum Mechanics - I

SKILLS

PROGRAMMING

Most Used:
C • Python • Octave • SOlidWorks
Git • Bash • Android • LaTeX • Java
Familiar:
HTML • CSS • JavaScript • Vim • GNUPlot • R
Beginner:
C++ • OpenCV • Assembly • Vector Graphics(InkSpace)

LANGUAGES KNOWN

Bengali(mother tongue) • English • Hindi • French(Level-1)

POR

- Student Guide, Counselling Service
- Academic Mentor, Counselling Service

EXTRA CURRICULARS

Oil Painting Featured in Antaragni Exhibition • Secretary-Fine Arts Club • Secretary-ACA,CSE,IITK • Champions - Intra Hall Football Tournament,Galaxy Fine Arts(2016)• Member-AUV,Robotics Club(2015); Music Club, IITK• Volunteer-Antaragni,FAC events

EDUCATION

Year	Degree	Institute	CPI/%
2015-2019(expected)	B.Tech, CSE	IIT Kanpur	9.5/10.0
2015	Higher Secondary Exam	RKMV Narendrapur	97.2%
2013	Madhyamik Exam(10th)	RKMV Narendrapur	95.6%

ONLINE COURSES, PROJECTS, HACKATHONS

MACHINE LEARNING | Coursera online course by Andrew Ng

May 2017 – July 2017 | Passed with 94.9% grade
Studied and implemented the following topics in Octave:

- Supervised Learning, Linear and Logistic regressions, Classification
- Neural Networks , Learning Curves, using an SVM with linear and Gaussian kernel .
- Clustering Algorithms, Anomaly detection and exposure in OCR and Online Learning.

MELODIC SIMILARITIES | Music Recommendation based on cognitive similarities (ongoing)

- Based on Eugene Nurmours Implication Realisation theory of Melodic Structure, building a music recommender system which suggests music pieces based on listeners cognitive preferences, working under Prof. Nisheeth Srivastava in this project.

BIOINFORMATICS | Coursera Online Course with Project

Certificate earned on January 30, 2017| Organised by, UC San Diego

- In depth knowledge of genetic processes.
- Studied genetic algorithms like Motif finding using greedy approach and Origin of Replication and implemented them in JAVA. View Code

ALGORITHMS, ALGEBRIC COMPLEXITY | Narendra Summer Internship (Rank Estimation of Matrix Spaces)

May 16 -July 17, 2017 | Computer Science and Automation Department, IISC Bangalore
Worked with Dr. Chandan Saha to study algorithms for Maximum Rank Estimation of Matrix Spaces, solved some intermediate but natural cases. Worked on Wong Sequences and Deterministic PTAS. See Poster

DISCRETE GEOMETRY | Course Project Discrete Math

Studied and gave talk on Sylvester-Gallay Theorem. talk slides

ACHIEVEMENTS AND AWARDS

2016		Academic Excellence Award,IIT Kanpur
2015	All India Rank 172	JEE Advance,2015
2015	2nd	West Bengal JEE in Engineering
2015	Award (5th in HS)	Mamraj Agarwal Rashtriya Puraskar,Governor,WB
2015	Award (5th in HS)	Felicitation by Chief Minister
2015	Participant	InPhO, InChO 2015
2014	Top 1%	National Standard Examination in Physics
2014	Top 10%	National Standard Examination in Chemistry
2013	Fellowship	Kishore Vaigyanik Protsahan Yojana

OTHER INTERESTS

- Quantum Computation, Cognitive Science, Football, Harmonium.