

Aman Deep Singh

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EDUCATION

IIT KANPUR

M.TECH. IN COMPUTER SCIENCE

Expected May 2020

Cum. GPA: 9.5

B.TECH. IN COMPUTER SCIENCE

July 2015-May 2019

Cum. GPA: 8.7

NALANDA ACADEMY

CLASS XII | CBSE

Grad. 2015| Kota, India

Percentage : 95.6%

GAIL DAV

CLASS X | CBSE

Grad. 2013| Auraiya, U.P., India

CGPA: 10.0

ACHIEVEMENTS

- Received Academic Excellence Award from IIT Kanpur for 2016-17 academic session
- Awarded A* grade for exceptional performance in the course Probability and Statistics
- Secured AIR 206 in JEE Advanced 2015
- Secured AIR 5 in National Talent Search Examination 2013
- Qualified NSEP, NSEC, NSEA 2015 & secured a rank in the top 1% of all appearing candidates in NSEP

COURSEWORK

MACHINE LEARNING: Topics in Probabilistic Modelling and Inference, Computer Vision, Natural Language Processing, Information Retrieval, Machine Learning Techniques

COMPUTER SCIENCE: System Security, Blockchain, DBMS, Data Structures & Algorithms, Algorithms II, Compilers, Operating Systems, Computer Organization

MATHEMATICS: Introduction to Probability & Statistics, Stochastic Processes

COGNITIVE SCIENCES: Computational Cognitive Science, Neurobiology, Cognitive Linguistics, Social Cognition

TECHNICAL SKILLS

LANGUAGES: C, Python, R, Bash

LIBRARIES: PyTorch, Tensorflow, Keras

TOOLS: Git, GDB, Docker, Flask, L^AT_EX

EXPERIENCE

ADOBE SYSTEMS PVT. LTD.

RESEARCH INTERN

May 2018-July 2018 | Bengaluru, India

- Created an approach for automatically adapting website to provide customized experience leveraging website content, historic analytics data and user preferences
- Built a working prototype of the solution, which augments a website based on the output of the deep learning module
- Published In Proceedings of IUI '19 Companion
- Was offered a Pre Placement Offer based on the value offered to the company

VIOS MEDICAL PVT. LTD.

MACHINE LEARNING INTERN

May 2017-July 2017| Bengaluru, India

- Designed a module to convert speech input from user to text, parse natural language into structured data, extracting entities like intention and target
- Implemented a deep recurrent network, experimenting with different architectures, for analysis of physiological data and disease symptom detection

KGMU-IITK CLINICAL IMMERSION PROGRAM

May 2019 - July 2019 | KGMU, Lucknow

- Worked closely with doctors at KGMU Lucknow finding problems faced by them in their medicinal and surgical practice
- Proposed a low cost alternative to currently used Videonystagmographs
- Developed Eye landmark detection software to be deployed on mobile computing platforms for low cost Videonystagmography
- Bagged Second position in Medical Technology Hackathon at IIT Kanpur

PROJECTS

OCCLUDED FACE RECOGNITION

SUPERVISOR: DR. VINAY NAMBOODIRI

May 2019- Present

- Worked on developing robust open set face recognition system capable of handling conditions of heavy occlusion and disguise
- Trained the model against adversarial examples generated by Conditional GAN

OTHER PROJECTS

- Atomic R-C3D: Atomic Proposal Network for Human Action Recognition in Untrimmed videos
- Multi-task Bayesian Optimization
- Secure Zero trust File Storage
- Lexical Text Simplification
- ADA to x86 compiler
- DeCaptcha: Breaking Text based Image captcha

CO-CURRICULAR ACTIVITIES

TEACHING ASSISTANT

- Visual Recognition
- Computing Lab

STUDENT GUIDE, COUNSELLING SERVICE

- Assisted 6 freshmen to acclimatize to the campus life and motivated them to explore opportunities at hand

TALK ON ERROR CORRECTION CODES

- Delivered a talk which aimed at familiarizing the audience with basic error detection and correction techniques like linear codes and related mathematics