Kulin Shah

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EDUCATION

IIIT HYDERABAD
B.Tech in Computer Science And Engineering
July 2015 - Present
Hyderabad, Telangana, India.
Cum. GPA: 9.04/10

CODING

- Codechef: 2076 (5 Star)*
- Codeforces: 1665 (Expert)*

* Max. rating

SKILLS

PROGRAMMING
C++ • C • Python • Matlab
HTML • CSS • JavaScript • LATEX
• Bash • MySQL

FRAMEWORKS & TOOLS
Keras • TensorFlow • PyTorch •
scikit-learn • Numpy • OpenGL
• Unity3D • Django • Git

COURSEWORK

TEACHING ASSISTANT
- Algorithms
- Statistical Methods in AI

IMPORTANT COURSES
Data Structures • Algorithms •
Artificial Intelligence • Game
Theory • Statistical Methods in AI •
Optimization Methods • Digital
Signal Analysis & Applications •
Graphics • Computer Vision •
Operating Systems • Distributed
Systems • Computer Networks •
Structural System Analysis Design &
Project • Introduction to Database •
Discrete Maths & Graph Theory •
Probability & Complex Analysis •
Linear & Abstract Algebra
• Functional Analysis • Compilers*
• Topics in ML*

* means Currently doing

HOBBIES

- Volleyball Team Captain of Agni House in Inter-House volleyball (2017-2018).
- Volleyball Team member for Inter-House and Inter-Batch tournament in all years.

EXPERIENCE

INDIAN INSTITUTE OF SCIENCE | Research Intern
May 2018 – July 2018 | Bangalore
- Mentor: Dr. PS Sastry, Professor, IISc Bangalore.
- Worked on various aspects of new neural network-Capsule network and compared his performance with conventional CNNs.
- Currently working on a research problem on polyhedral learning with Dr. PS Sastry and Dr. Naresh Manwani.

GIBBR | Software Developer
Aug 2016 – Dec 2016 | Hyderabad
- Mentor: Jayanth Rasamsetti(Cur.:Principal AI/ML Scientist at TalentSprint)
- Worked on building prototype of a social platform for creating 360 degree photo-spheres from any mobile images or DSLR images and sharing.
- Developed overall backend of the application using Hugin, Pannelum, Django.

MACHINE LEARNING LAB | Honours Research Student
May 2017 - Present | IIIT Hyderabad
- Mentor: Dr. Naresh Manwani, Assistant Professor, MLL.
- Working on multiple projects on Reject Option Classifier, Non-convex Optimization, Multi-armed Bandit.

PUBLICATION

1. Kulin Shah , Naresh Manwani. 'Sparse Reject Option Classifier using Successive Linear Programming'. AAAI 2019   *Link*

ACHIEVEMENTS

Sub-reviewer	Sub-reviewer of ACM IKDD CoDS-COMAD 2019
AAAI Scholar	Awarded travel grant for AAAI 2019 as AAAI scholar
Google Travel Grant	Awarded travel grant for AAAI 2019
10 GPA	Perfect 10 GPA in semester Spring, 2018
Dean's List	Awarded Dean's List in Spring, 2016, 2017, 2018
Rank 34	Online round ACM ICPC,2018
Rank 53	ACM ICPC, Amritapuri Regionals, 2017

PROJECTS

UNIVERSAL STYLE TRANSFER
- Implemented universal style transfer via feature transforms using Coloring Transform, Whitening Transform and decoder.

AI BOT FOR ULTIMATE TIC-TAC-TOE
- Implemented using Monte Carlo Tree Search (MCTS) and Upper Confidential Bound (UCB).

RELATIVE ATTRIBUTES
- Implemented an algorithm to learn relative visual attribute strength of images and image description in reference to an example image.

CONSISTENT BELLMAN OPERATORS
- Studied inconsistency problem in Bellman operator and the solution of it. Implemented new bellman operator in deep Q-network.

PRICING SCHEMES FOR CONSUMERS WITH EVOLVING VALUES
- Studied mechanism of pricing model where the consumer discovers his value for the good only as he uses it