NIKITA AGARWAL

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EDUCATION

Examination	Institute/Board	Year	Current CGPA/%
UnderGraduate Specialization	*Computer Science and Engineering*		
Graduation	IIT Ropar	2022	9.02
XII Boards	CBSE	2018	94.3
X Boards	ICSE	2016	96.6

TECHNICAL SKILLS

Languages:	C++	CSS	HTML	Python	Javascript	Verilog
Libraries:	fast.ai	Keras	Pytorch	Numpy	Matplotlib	Pandas
Tools and other Skills:	Matlab	Jupyter Notebook	Vivado	git	Bootstrap	

PROJECTS

- **Microsoft Engage 2020** [github] ***-Ongoing***
  - Developing a Path Finding Web based Application, supporting various algorithms like **A*, IDA* and Best First Search** amongst others.
- **Image Captioning for the Blind** [github] ***-Keras,Tensorflow***
  - Objective :Build model to caption images clicked by the blind in their day-to-day lives .
  - Challenge: Images are often blurry and out of focus, without proper alignment of objects.
  - A **CNN encoder(Fine tuned InceptionV3), RNN(LSTM) decoder system with Bahdanau Attention** to efficiently caption the images. Prior image processing required to deal with issues.
- **News Classifier System [github]** ***-fast.ai***
  - Objective :Build model to classify news on the basis of content and headlines to various categories .
  - First built language model using **wikitext-103 and then transfer learning to classify news using AWD-LSTM architecture**, achieved 85% accuracy
- **Pipelined RISC-V ISA Simulator** ***-C++***
  - Final Course Project of Computer Architecture Course
  - Developed pipelined RISCV-ISA simulator for **parallel instruction execution with dataforwarding, bit prediction and inter-state caches.**

RELEVANT COURSES

Computer Science: Introduction to Computing, Data structures, Digital Logic Design,Computer Architecture, Programming Paradigms, Digital Image Processing.
Mathematics: Calculus, Linear Algebra, Differential Equations,Discrete Mathematics, Probability and Statistics.
MOOCs: CS231n Convolutional Neural Networks for Visual Recognition(Stanford University), Design and Analysis of Algorithms(NPTEL),Web Development(Udemy)

POSITIONS OF RESPONSIBILITY AND VOLUNTEERING

Coding Club :Coordinator
AI Commnunity: Member
WomenTech Network:Global Ambassador

MISCELLANEOUS

Academic	Secured **98.36 percentile** in JEE Advanced,2018 and **99.7 percentile** in JEE Mains,2018
Hobbies	Debating, blogging and photography