

# Rohit Gajawada

U.S. Citizen

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## EDUCATION

**Georgia Institute of Technology**, Atlanta, Georgia  
*Master of Science in Computer Science*

*Aug '19 - May '21 (expected)*

**International Institute of Information Technology (IIIT-H)**, Hyderabad, India  
*Bachelors of Technology in Computer Science and Engineering (Honors in Computer Vision)*

*Aug '15 - May '19*

GPA: 3.46/4.0

## EXPERIENCE

**Computer Vision Center** - Universitat Autònoma de Barcelona

*May '18 - July '18*

- Worked as an intern on domain adaptation via GANs for end-to-end imitation learning for autonomous driving.
- Implemented CycleGAN, UNIT, WDGRL and LSDSEG based methods for domain adaptation.
- Trained models in PyTorch and CARLA Simulator, deployed in real world using Jetson TX2 and Raspberry Pi.

**Center for Visual Information Technology** - IIIT-H

*Mar '17 - Apr '19*

- Developed a full binarization method for deep CNNs that attains an increase of upto 8% in accuracy and 21% in compression.
- Developed a distribution-aware approach for binarizing deep CNNs that attains an increase of 2.5% in accuracy.
- Created a data augmentation method for fingerprint spoof detection resulting in upto 3% increase in TDR.
- Worked on projects related to generative adversarial networks, tracking, metric learning, OCR and image retrieval.

**Teaching Assistant** - IIIT-H

*Jan '18 - May '19*

- Courses: Computer Vision (Spring '19), Computer Graphics (Spring '18)
- Conducted tutorials, mentored students for projects, graded and helped in design of assignments and exams.

## PROJECTS

**Eye Gaze Detection using Attention Modelling**

*(PyTorch, Python)*

- Implemented a deep learning model that follows the gaze of people and identifies salient objects in an image.
- The model does this by extracting head pose and gaze orientation of faces detected by a SSD detector.

**BrickBreaker, Bloxorz and 3D Aquarium**

*(C++, OpenGL, JS, WebGL)*

- Brickbreaker and Bloxorz are 2D and 3D games respectively which incorporate physics, lighting and shaders.
- Created a 3D Aquarium with lighting, bubbles, reflective glass and multiple kinds of fish.

**Ultimate Tic-Tac-Toe Bot**

*(Python)*

- Developed a tree search based game bot using minimax algorithm, alpha beta pruning and heuristics.

**Reinforcement Learning Algorithms**

*(PyTorch)*

- Implemented sample efficient ACER, DQN, Double DQN, Policy Gradient and Actor-Critic agents.

**Distributed Chat Room**

*(Java)*

- Created a client-server setup that maintains multi-threaded chat rooms between many clients.

**K-Nearest Neighbors based classifier**

*(Python)*

- Built a k-NN classifier with feature engineering and BoW preprocessing for author identification of documents.

## PUBLICATIONS

- *Hybrid Binary Networks: Optimizing for Accuracy, Efficiency and Memory*, A. Prabhu, V. Batchu, **R. Gajawada**, S. Munagala, A. Namboodiri, *WACV 2018*
- *Distribution-Aware Binarization of Neural Networks for Sketch Recognition*, A. Prabhu, V. Batchu, S. Munagala, **R. Gajawada**, A. Namboodiri, *WACV 2018*
- *Universal Material Translator: Towards Spoof Fingerprint Generalization*, **R. Gajawada\***, A. Popli\*, T. Chugh, A. Namboodiri, A.K. Jain, *ICB 2019*

## TECHNICAL SKILLS

<b>Programming Languages</b>	Python, C, C++, MATLAB, Bash, Java, HTML, CSS, JavaScript
<b>ML/DL/CV</b>	PyTorch, Keras, TensorFlow, OpenCV, scikit-learn, scikit-image
<b>Other Libraries and Tools</b>	Git, LaTeX, OpenGL, WebGL, SQL, PyGame

## RELEVANT COURSES

Computer Vision, Machine Learning, Digital Image Processing, Optimization Methods, Artificial Intelligence, Software Engineering, Computer Graphics, Reinforcement Learning, Data Structures, Algorithms, Operating Systems, Web Dev, Scripting