Rohit Gajawada

U.S. Citizen
Houston, TX 77041

+1-832-903-9441
rohitgajawada@gatech.edu
rohitgajawada.github.io

EDUCATION

Georgia Institute of Technology, Atlanta, Georgia — *Aug '19 - May '21*
Master of Science in Computer Science (Specialization in Machine Learning) — **GPA: 4.0/4.0**

International Institute of Information Technology (IIIT-H), Hyderabad, India — *Aug '15 - May '19*
Bachelors of Technology in Computer Science and Engineering (Honors in Computer Vision) — **GPA: 8.41/10.0**

TECHNICAL SKILLS

Programming Languages	Python, C, C++, SQL, MATLAB, Bash, JavaScript, Java, HTML, CSS
ML/CV Libraries	PyTorch, Keras, scikit-learn, TensorFlow, OpenCV
Miscellaneous	Git, numpy, pandas, LaTeX, pytest, OpenGL, Flask, Docker, PySpark

EXPERIENCE

Software Engineering Intern - Uber ATG, San Francisco, CA — *Aug '20 - Dec '20*

- Solving problems in perception for unstructured autonomous driving on the Autonomy Capabilities team.
- Working on a jointly learnt approach for doing birds eye view and range view semantic segmentation in PyTorch and C++.
- This approach involves camera and lidar sensor fusion along with single frame and temporal sequence refinement.
- Developing an evaluation metrics suite for birds eye view and range view semantic segmentation.

Machine Learning Intern - PathAI, Boston, MA — *May '20 - Aug' 20*

- Developed deep learning based multi-task learning and fusion approaches for cancer diagnosis of whole slide images.
- Showed that common features between cell and tissue models results in upto a 5% accuracy boost and better heatmaps.
- Integrated these features with unit tests after code review into PathAI's ML platform using TensorFlow and Keras.

Machine Learning Intern - Computer Vision Center, Universitat Autònoma de Barcelona — *May '18 - July '18*

- Worked on unsupervised domain adaptation for end-to-end imitation learning for autonomous driving.
- Trained models in PyTorch and CARLA Simulator, deployed in real world using Jetson TX2 and Raspberry Pi.

Teaching Assistant - Georgia Tech, IIIT-H — *Jan '18 - Apr '20*

- Courses: Computer Vision (Spring '20, Spring '19), Graphics (Spring '18)

PROJECTS

Automatic Top View Registration of Sports Videos *(Python)*

- Created a semi-supervised method using homography based camera augmentations, KNN, HOG matching and pix2pix.

Eye Gaze Follower *(PyTorch, Python)*

- Implemented a model that follows the gaze of people detected by a SSD detector by extracting saliency and head pose.

Embedding Common Sense into Question Answering *(PyTorch, Python)*

- Implemented a BERT based MCQ solver augmented with a GPT model trained on a common sense knowledge graph.

Part Of Speech Tagger *(PyTorch, Python)*

- Implemented an LSTM based POS Tagger that uses embeddings of both word level and character level n-grams.

Game Development Projects *(C++, OpenGL, JS, WebGL)*

- Developed a 2D game, a 3D game and a 3D aquarium simulator which incorporate physics, lighting and shaders.

PUBLICATIONS

- ***Universal Material Translator: Towards Spoof Fingerprint Generalization***, ***R. Gajawada***, *A. Popli, T. Chugh, A. Namboodiri, A.K. Jain,* ***ICB 2019***
- ***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***

RELEVANT COURSEWORK

Computer Vision, Machine Learning, Software Engineering, Natural Language Processing, ML with Limited Supervision, Artificial Intelligence, Digital Image Processing, Graphics, Mobile Manipulation, Algorithms, Operating Systems