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, Java, JavaScript, HTML, CSS
ML/CV Libraries	PyTorch, Keras, scikit-learn, TensorFlow, OpenCV
Miscellaneous	Git, numpy, pandas, LaTeX, pytest, OpenGL, pybind11, Flask, Docker, PySpark, Jira

EXPERIENCE

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

- Developed a novel camera and lidar sensor fusion based deep learning approach for birds eye view segmentation, which is on par with state of the art methods while being more computationally and memory efficient on vehicle.
- Added a temporal fusion extension to this using ConvLSTMs which performs much better especially on low to the ground obstacles and construction. This method can be jointly trained with range view segmentation allowing further improvement.
- Developed a distributed IoU metrics suite for evaluation of birds eye view and range view semantic segmentation models.
- Integrated all these features into ATG's perception codebase after code review using PyTorch and Python.

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 after code review into PathAI's ML platform using TensorFlow, Keras and Python.

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, OpenCV, PyTorch)*

- 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.

Distributed Tic-Tac-Toe and Chat Room *(Java)*

- Developed a distributed client server setup that can handle multiple games and chatrooms using the Java RMI protocol.

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, Algorithms, Data Structures, ML with Limited Supervision, Operating Systems, Database Systems, Distributed Systems, Graphics, Mobile Manipulation