

Animesh Ramesh

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EDUCATION	Carnegie Mellon University , Pittsburgh, PA	Aug 2016 – Dec 2017
	<ul style="list-style-type: none">▪ Master's in Computer Vision, Robotics Institute (4.0 GPA)• Coursework : Machine Learning, Computer Vision, Deep Learning, Geometric based methods in Computer Vision	
	M S Ramaiah Institute of Technology , Bangalore, India	Aug 2012 – Jun 2016
	<ul style="list-style-type: none">▪ Bachelor of Engineering (B.E.) in Computer Science, GPA: 9.10 / 10.0• Coursework : Artificial Intelligence, Data Structures and Algorithms, Big Data & Data Science, Design & Analysis of Algorithms, Network Security.	
EXPERIENCE	Orbital Insight , Palo Alto, CA (<i>Deep Learning Engineer</i>)	Feb 2018 – Current
	<ul style="list-style-type: none">• Responsible for developing a scalable infrastructure to train and benchmark deep learning models. (Primarily related to image segmentation, recognition and object detection)• Developed a deep learning model to detect crops (like corn, soy, etc) from Landsat imagery in the US.• Trained a model to detect buildings and roads in high resolution imagery. (50cm resolution)• Built a model to detect vehicles in Skysat imagery. (80-100cm resolution)	
	Flipkart , Bangalore, India (<i>Software Engineering Intern</i>)	Jan 2016 – May 2016
	<ul style="list-style-type: none">• Developed a robust Question & Answer platform for internal use.• This platform was used regularly by employees for holding quick polls, receiving feedback/ideas, managing Q&As and brainstorming.	
	Acoustic Research Lab , NUS, Singapore (<i>Research Intern</i>)	May 2015 - Aug 2015
	<ul style="list-style-type: none">• Gained hands-on experience in integrating autonomous waypoint navigation with the NUSwan project. (A Robotic Water sensor)• The watercraft must reach a specified set of destinations avoiding all the obstacles in between.• Resolved several issues successfully which arose due to water turbulence. (like disoriented images)	
PROJECTS	Multi-Label Image classification	
	<ul style="list-style-type: none">• Developed a model to assign multiple labels for images in a Fashion dataset.• Achieved this by training and stacking multiple models on SOTA architectures on more than a million images.	
	Image Super-Resolution using Progressive GANs	
	<ul style="list-style-type: none">• Trained a GAN based architecture to generate high-resolution images from their low resolution counterparts.	
	Multimodal Contextual Prior Networks for Visual QA	
	<ul style="list-style-type: none">• Developed a state-of-the-art deep learning model to answer questions based on images from the VQA 1.0 dataset.• Integrated dense image captions in order to capture rich contextual information for answering questions.	
	Activity Recognition using Hard Attention on Human Pose	
	<ul style="list-style-type: none">• Built a two-stream deep learning model to predict human actions on the HMDB dataset.• Leveraged the human pose in the input frames to create explicit attention maps in the optical flow frames.	
	Deep Convolutional Patch Networks for Road Segmentation	
	<ul style="list-style-type: none">• Designed a deep convolutional patch network which performs pixel-wise binary classification to detect available road space on the KITTI dataset.	
AWARDS	▪ Top 30 (out of more than 300 teams) at PennApps XIV, Philadelphia	Sep 2016
	Developed a real time anomalous event detection system using OpenCV in 24 hours.	
	▪ Top 50 (out of almost 2000 teams) in ACM ICPC Asia Regional Contest	Dec 2014
	▪ Winner of a 24hr Hackathon conducted by Yodlee, Bangalore	Mar 2014
	For developing a prototype using Yodlee's APIs to determine customer satisfaction on purchased products.	
	▪ Winner of a 24hr Hackathon in PESIT, Bangalore	Mar 2014
	For implementing a cost-effective and a personalized cloud storage solution using a Raspberry pi.	
SKILLS	Proficient: Keras, Python	
	Familiar: Tensorflow, Pytorch, Numpy, Scikit-learn, OpenCV, C++, Java, Android	