N DINESH REDDY

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EDUCATION

JAN '17 - CUR	PhD in Robotics, **CMU RI**, USA Advisor: Prof. Srinivasa Narasimhan
DEC '13- MAR '16	Master of Science in Computer Science, **IIIT-Hyderabad**, INDIA Advisor: Prof. K Madhava Krishna
AUG '09 - AUG '13	Bachelor of Engineering (hons) in EEE, **BITS-Pilani**,INDIA Advisor: Prof. Suman Kapur

RESEARCH EXPERIENCE

JAN '17 - CUR	Graduate Research Assistant, **ILIM Lab, CMU, USA** Project: Worked on using multi-vew information for improvement. Consequently creating a virtual time machine to browse through events Advisor: Prof. Srinivasa Narasimhan
JUNE '20 - DEC '20	Applied Scientist(II) Intern, **Amazon Go, Seattle, USA** Project: Worked on end-to-end learnable tracking framework for 3D human pose Advisor: Laurent Guiges
MAR '16 - DEC '16	PHD Intern, **Max Planck institute for intelligent systems, Germany** Project: Learning reconstruction using deep neural networks. leveraging advances in neural networks for accurate large scale reconstructions Advisor: Dr. Andreas Geiger
AUG '13 - MAR '16	Graduate Research Assistant,**RRC, IIIT hyderabad, INDIA** Project: Exploiting Semantic Information for Accurate Segmentation, Localization in Dynamic Environments. Helping in autonomous navigation of challenging environments Advisor: Prof. K Madhava Krishna
JAN '13 - AUG '13	Undergraduate Research Assistant,**Biology lab, BITS-Pilani, INDIA** Project: Creating low cost medical research for indian rural population. Worked on 2 rupee(5 cent) diabetic sensor currently being manufactured Advisor: Prof. Suman Kapur

TEACHING EXPERIENCE

Special Topics on Geometric Methods in Vision(Instructor Prof. Srinivasa Narasimhan and Prof. Kris Kitani)
Geometry Based Methods in Vision(Instructor Prof. Martial Hebert))
Computer Vision(Instructor Prof. Srinivasa Narasimhan)

SELECTED AWARDS

- Qualcomm Innovation Fellowship Finalist 2021($100k award)
- AMAZON GO PHD Fellowship 2020 (one year of Tuition and stipend)
- Microsoft Research Travel grant to attend IROS 2015.
- IROS student scholarship to attend IROS 2015.

ACADEMIC SERVICES

- Invited program committee for AAAI 2020-, ICCP 2021-
- Invited Reviewer for CVPR 2019-,ICCV 2019-, 3DV 2021-, ECCV 2020-,ICRA 2020-,IROS 2019-,AAAI-2019,ACCV 2019-
- Invited talk at RPAD, CMU on 13-06-2020
- Invited talk at perceiving systems group, Max planck Institute, Tubingen on 02-10-2015

MINI-PROJECTS AND INTERNSHIPS

- Interned at Bhilai Steel plant(May '11 - Aug '11) working on AC to DC conversion of power for engines.
- Interned at Sabre holding(Aug '12 - Dec '12) working on database management for flight scheduling.
- Interned at SDD, Indian Army(May '12 - Aug '12) working on trajectory of bullet.
- A Low Cost Mini-Weather Station Texas Instruments MCU design contest.Link
- Developed the product for testing the antibiotic is resistant or sensitive for urinary tract infection.
- A Quadrotor Platform For Mines detection at Indian Army.
- Line follower bot following a strip of black line with PID integration.

Student Supervised

Xudong Chen (Masters in Computer Vision at CMU in 2019)(Now at Nvidia)
Maying Shen (Masters in Computer Vision at CMU in 2019)(Now at Nvidia)
Mengqing Jiang (Masters in Computer Vision at CMU in 2019)(Now at Waymo)
Fangyu Li (Masters in Computer Vision at CMU in 2019)(Now at Nvidia)
Zhiyu Min (Masters in Computer Vision at CMU in 2019)(Now at Google)
Yijun Luo (Masters in Computer Vision at CMU in 2019)(Now at Google)
Te-Li Wang (Masters in Computer Vision at CMU in 2018)(Now at Facebook Reality Labs)
Suriya Narayanan Lakshmanan (Masters in Computer Vision at CMU in 2018)(Now at Cyngyn)
Nazrul Athar (Masters at IIIT hyderabad in 2017)(Now at Booking.com, Amsterdam)

EXTRA-CURRICULAR ACTIVITIES

- Batmintom team member and president at BITS, IIIT and CMU.
- Active member of the IEEE student chapter and organized the IEEE Annual Conference, INDICON 2011.
- Nucleus member of the National Social Service (NSS)
- Have attended numerous Technical fests of different colleges, Technozion 2011 of NIT Warangal, Quark 2012 of BITS Goa and Magistech 2011 of MGIT Hyderabad .
- Organizing member of the cultural fest of our college, pearl 2010 and pearl 2011.

PEER-REVIEWED PUBLICATIONS

N Dinesh Reddy, Laurent Guigues, Leonid Pishchulin, Jayan Eladeth, Srinivasa Narasimhan. [Project]
TesseTrack: End-to-End Learnable Multi-Person Articulated 3D Pose Tracking
*Int' conf' on Computer vision and pattern recognition(***CVPR***), 2021.*

Fangyu Li, **N Dinesh Reddy**, Xudong Chen, Srinivasa Narasimhan. [Project]
Traffic4D: Single View 4D Reconstruction of Repetitious Activity Using Longitudinal Self-Supervision
*Int' conf' on Intelligent Vehicles Symposium(***IV***), 2021.*

Mark Shenin, **N Dinesh Reddy**, Matthew O'Toole, Srinivasa Narasimhan. [Project]
Diffraction Line Imaging
*European Conference on Computer Vision(***ECCV***), 2020.* **(ORAL)**

N Dinesh Reddy, Minh Vo, Srinivasa Narasimhan. [Project]
Occlusion-Net: Occlusion-Net: 2D/3D Occluded Keypoint Localization Using Graph Networks
*Int' conf' on Computer vision and pattern recognition(***CVPR***), 2019.*

N Dinesh Reddy, Minh Vo, Srinivasa Narasimhan.[Project]
CarFusion: Combining Point Tracking and Part Detection for Dynamic 3D Reconstruction of Vehicles
*Int' conf' on Computer vision and pattern recognition(***CVPR***), 2018.*

N Dinesh Reddy, Iman Abbasnejad, Sheetal Reddy, Amit K Mondal and Vindhya Devalla.[Project]
Incremental Real-time Multibody VSLAM with Trajectory Optimization Using Stereo Camera.
*Int' Conf' on Intelligent Robots and Systems(***IROS***), 2016.*

N Dinesh Reddy*, Falak Chayya*, Sarthak , Visesh , Zeeshan and K Madhava Krishna.[Project]
Monocular Reconstruction of vehicles : Combining SLAM with Shape Priors.
*IEEE Int' Conf' on Robotics and Automation(***ICRA***), 2016.*

N Dinesh Reddy, Prateek, Visesh Chari and Madhava Krishna.[Project]
Dynamic Body VSLAM with Semantic Constraints.
*Int' Conf' on Intelligent Robots and Systems(***IROS***), 2015.*

Nazrul Athar, **N Dinesh Reddy**, K Madhava Krishna
Temporal Semantic Motion Segmentation using Spatio Temporal Optimization
*Int' Conf' on Energy Minimization Methods in Computer Vision and Pattern Recognition (***EMMCVPR***), 2017.***(ORAL)**

Nazrul Athar, **N Dinesh Reddy**, K Madhava Krishna [Project]
Monocular Semantic Motion Segmentation using Dilated Convolutions
*Int' Conf' on Computer Vision Theory and Applications (***VISAPP***), 2017.* **(ORAL)**

N Dinesh Reddy, Prateek Singhal and K Madhava Krishna. [Project]
Semantic Motion Segmentation Using Dense CRF Formulation.
*Ind' Conf' on Computer Vision, Graphics and Image Processing (***ICVGIP***), 2014.* **(ORAL)**

Prateek Singhal, Aditya Deshpande, Harit Pandya, **N Dinesh Reddy** and K Madhava Krishna.
Top Down Approach to Detect Multiple Planes from Pair of Images.
*Ind' Conf' on Computer Vision, Graphics and Image Processing (***ICVGIP***), 2014.* **(ORAL)**