email: karnikram@gmail.com github:/karnikram

Fall 2019

July 2019

Summer 2016

2014, 2015

Interests Visual SLAM, 3D Computer Vision

EDUCATION International Institute of Information Technology, Hyderabad, India (IIIT-H) 2018 - 2021

M.S. by Research in Computer Science & Engineering

Thesis: Robust Visual-inertial Odometry for Highly-dynamic Scenes

Advisor: Dr. K. Madhava Krishna

Cumulative Grade Point Average: 9.50/10

Sri Sivasubramaniya Nadar College of Engineering, Chennai, India (SSN) 2013 - 2017

B.Eng. in Electronics & Communication Engineering (ECE) from Anna University, Chennai

INFER: Intermediate Representations for Future Prediction % **PUBLICATIONS**

Shashank Srikanth, Junaid Ahmed Ansari, R. Karnik Ram, Sarthak Sharma, J. Krishna Murthy, K.

Madhava Krishna

In proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems, 2019

CalibNet: Geometrically-Supervised LiDAR - Camera Extrinsic Calibration using 3D Spatial Transformer Networks &

Ganesh Iyer, R. Karnik Ram, J. Krishna Murthy, K. Madhava Krishna

In proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems, 2018

EXPERIENCE International Institute of Information Technology, Hyderabad, India

> Teaching Assistant Designed and evaluated assignments, and held tutorials for the graduate course in Mobile Robotics.

ETH Robotics Summer School

Participant

Worked on a semi-autonomous ground robot for search-and-rescue applications.

Mobile Robot Programming Toolkit

Summer 2018

Google Summer of Code Student Developer

Developed a GUI app for the extrinsic calibration of range and visual sensors.

International Institute of Information Technology, Hyderabad, India May 2017 - April 2018

Research Intern in the Robotics Research Center

Worked on markerless LiDAR-camera extrinsic calibration for an autonomous car.

Navstik Autonomous Systems, Pune, India

Computer Vision Intern Developed and evaluated GPU-accelerated person tracking algorithms for a drone.

Relevant Coursework Graduate: Computer Vision, Machine Learning, Mobile Robotics, Topics in Applied Optimization,

Topics in Optimization on Manifolds

Undergraduate: Robotics & Automation, Digital Image Processing, OOP & Data Structures, Computer

Architecture, Probability & Random Processes, Embedded & Real Time Systems

AWARDS & Grants • ETH Robotics Summer School Travel Grant 2019

• Best Senior Year Project, ECE Department, SSN 2017

• First place, inter-college image processing based robotics event, Anna University 2016

• SSN Trust Funding for Student Projects

STUDENT ACTIVITIES

• Student System Administrator for the compute cluster at RRC, IIIT Hyderabad. 2020

• Conceived, developed, and maintained The SSN App - the official mobile app of SSN. 2014 - 2017

Tools & Libraries: OpenCV, ROS, PCL, PyTorch, Matlab, Git | Familiar: Qt, Android TECHNICAL

SKILLS Programming Languages: C/C++, Python | Familiar: Java