email: karnikram@gmail.com github:/karnikram

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

Publications INFER: Intermediate Representations for Future Prediction %

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

July 2019

Fall 2019

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

Summer 2016

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 2014, 2015

• 55N Trust runding for Student Project

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

• Event Coordinator, SSN-ECE Tech Club 2016 - 2017

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

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

Last Updated: January, 2020