Sudharssan Mohan

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ABOUT

I am a PhD student specializing in Cyber-Physical Systems security, focusing on automated bug discovery and resilient defenses against malicious sensor-level attacks in robotic and autonomous vehicles. My broader goal is to secure CPS platforms against both software logic flaws and external adversarial manipulations. I am seeking opportunities to collaborate on CPS security research and actively pursuing internships in related areas.

RESEARCH INTERESTS

Cyber-physical Systems, in particular, Drone security and robotic vehicles security.

SKILLS

Programming: C, C++, Python, Bash

Tools & Platforms: ArduPilot, PX4, Gazebo, MAVProxy, Git, Linux

Technical Areas: Embedded systems, UAV simulation, sensor security, CPS security

EDUCATION

The University of Texas at Dallas

Dallas, TX, US Computer Science, Advisor: Dr. Chung Hwan Kim Ph.D. Student, January 2022 - Present

The University of Texas at Dallas

Computer Science

Dallas, TX, US M.S., August 2021 - August 2025

Rajalakshmi Engineering College

Computer Science end Engineering

Chennai, Tamil Nadu, India B.E., Aug 2017 - April 2021

PUBLICATION

Sudharssan Mohan, Kyeongseok Yang, Zelun Kong, Yonghwi Kwon, Junghwan Rhee, Tyler Summers, Hongjun Choi, Heejo Lee and Chung Hwan Kim. "IMUFUZZER: Resilience-based Discovery of Signal Injection Attacks on Robotic Aerial Vehicles" (to appear), in the 40th IEEE/ACM International Conference on Automated Software Engineering (ASE 2025), (Seoul, South Korea, 2025).

Kyeongseok Yang*, Sudharssan Mohan*, Yonghwi Kwon, Heejo Lee and Chung Hwan Kim. "Poster: Automated Discovery of Sensor Spoofing Attacks on Robotic Vehicles" (to appear), in the 29th ACM Conference on Computer and Communications Security (CCS 2022), (Los Angeles, CA, 2022). *Equal contribution.

EXPERIENCE

The University of Texas at Dallas

Researcher at the Software and Systems Security Lab (S3 Lab)

Teaching Assistant - Computer Networks CS4390

Teaching Assistant - Database Systems CS4347 Teaching Assistant - Database Design CS6360

Teaching Assistant - Operating System Concepts CS4348

Teaching Assistant - Information Security CS6324

Teaching Assistant - Computer Networks CS4390

Dallas, TX, US

Jan 2022 - Present Spring 2025

Fall 2024

Summer 2024

Fall 2023, Fall 2022 Spring 2023 2024

Spring 2022

VOLUNTEERING

The University of Texas at Dallas

Mentor – UTD CS K-12 Outreach Summer Camp	2022
Mentor – CAST STEM Bridge Summer Camp for K-12 Students	2022
Mentor – Clark Summer Research Program	2023
Rajalakshmi Engineering College	Chennai, Tamil Nadu, India
Rajalakshmi Engineering College Event Planner and Organizer – Intercollegiate Competitions	Chennai, Tamil Nadu, India 2018–2020

Dallas, TX, US