

KARTHIK GANESHRAM

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(530)-979-3160

EDUCATION

University of California, Davis

September 2021 - Present

MSc

Department of Electrical and Computer Engineering

University of California, Davis

September 2018 - December 2018

Global Study Program

GPA: 4/4

SRM Institute of Science and Technology

June 2016 - May 2020

Bachelor of Technology

Overall Percentage: 89.85/100

Department of Electronics and Communications Engineering

TECHNICAL STRENGTHS

Computer Languages

Javascript, C, MySQL, Python, Bash, Lua

Software & Tools

Linux, Node.js, Magic, Wireshark, Latex, Microsoft Office

Hardware

Raspberry Pi, Arduino, RISC-V, MIPS

EXPERIENCE

Indian Institute of Technology, Madras

August 2020 – April 2021

Project Associate

- Worked under Prof.Devendra Jalihal and Prof.Radhakrishna Ganti
- Tasked on a project in communication systems.

Indian Institute of Technology, Madras

December 2019 – April 2020

Undergraduate major project

- Internship for Major project for B.tech
- Worked under Prof.Devendra Jalihal
- Tasked with preparing and analyzing data collected from the internet router traffic to detect network traffic anomalies to create a dynamic firewall.

Indian Institute of Technology, Madras

May 2019 – June 2019

Research Internship

- Worked under Prof.Devendra Jalihal
- Tasked with building an openWrt based operating system with ability to capture the network traffic data and control routers from a centralized server.

UC Davis

October 2018 – November 2018

Research Project

- Worked under Prof.Kent Wilken
- Connecting low power micro-controllers securely to the internet.

Minambalam

May 2018 – July 2018

Web Development

- Created a new front-end interface for the editors of the magazine to streamline the publication process.
- Also created a serverless back-end architecture for the magazine.

Reliable Helping Hands

Web Development internship

March 2017 - May 2017

- Designed and maintained the website for the NGO.

ACADEMIC ACHIEVEMENTS

Achieved academic perfection during Global Study Program, UC Davis, 2018

Ranked 1/200 Inter-department Physics project Competition, SRM University, 2016

COURSES

Online Certification

Programming for everybody (Getting Started With Python) - Coursera

Python Data Structures - Coursera

Algorithms Specialization by Standfor University - Coursera

Nand2Tetris - Coursera

Online workshop

MYTH - Microprocessor Yourself in Thirty Hours

POSITION OF RESPONSIBILITY

Next Tech Labs — Student Research Lab

Tesla Lab

August 2017 - May 2020

SRMIST

- Research associate

PROJECTS

Blockchain-based medical system — Next Tech Labs

- A distributed medical system built for a hackathon aimed at providing reliable access to patient history and to curb fake prescriptions.

Home/Lab automation — Next Tech Labs

- Automatic control of electrical appliances in the house with integrated sensors. Manual control was allowed through a web application built for smartphones. It was built using Node.js and Raspberry Pi.

Autonomous RC vehicle — Personal project

- A autonomous RC vehicle capable of maintaining lane and detecting stop signs. capable of calculating distances of signs using monocular vision. It used OpenCV and raspberry pi for controlling the vehicle.