

# Harikrishnan R

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## EDUCATION

### BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI, GOA CAMPUS

B.E. (HONS.) ELECTRONICS & ELECTRICAL ENGINEERING  
Expected May 2018 | Goa, India

### KENDRIYA VIDYALAYA, PATTOM

CBSE | 12TH GRADE  
Grad. May 2013 | Trivandrum, India  
Percentage : 89%

### KENDRIYA VIDYALAYA, PATTOM

CBSE | 10TH GRADE  
Grad. May 2011 | Trivandrum, India  
CGPA : 9.6

## LINKS

[github.com/illustris](https://github.com/illustris)  
[linkedin.com/in/illustris](https://linkedin.com/in/illustris)

## COURSEWORK

### ONGOING

Real Time Systems

### COMPLETED

Mobile Telecom Networks • Analog Electronics • Power Electronics • Power Systems • Microprocessor and Interfacing • Computer Architecture • Cryptography • Digital Design • Control Systems • Data Communication Networks • Microelectronics • Computer Programming • Analog and Digital VLSI Design • Communication Systems

## SKILLS

### PROGRAMMING

C • C++ • Python • PHP • HTML • Shell Scripting • Assembly

### SECURITY

Reverse Engineering • Data Forensics • Network Forensics • Web Exploits • Cryptography

## EXPERIENCE

### RECONFIGURABLE INTELLIGENT SYSTEMS ENGINEERING LAB | INTERN

Dec 2016 - Jan 2017 | IIT Madras, India

- Learned Bluespec HDL and worked on 32 bit 3 stage RISC-V processor designs
- Updated FreeRTOS to revised privileged instruction set architecture specifications on RISC-V

### KERALA STATE ELECTRONICS DEVELOPMENT CORPORATION | INTERN

May 2016 - July 2016 | Kerala, India

- Learned and worked on high power UPS systems used by the Indian Nuclear Power Programme
- Replicated ship navigation systems based on old Intel 80486 with modern hardware

## PROJECT WORK

### MULTI-LEVEL MIXED CRITICALITY REALTIME SCHEDULING | DESIGN PROJECT

August 2016 - Present | Goa, India

Working with Dr. Biju K Raveendran to design and implement multilevel mixed criticality scheduling algorithms in Real Time Operating Systems

### HYPERLOOP INDIA | ELECTRONIC SYSTEMS LEAD

May 2016 - Present | Goa, India

Leading the team working on the electronics and control systems of the Hyperloop pod for the SpaceX Hyperloop Design Competition

## RECENT ACHIEVEMENTS

2016	168 <sup>th</sup> rank(global)	Google CTF 2016
2016	98 <sup>th</sup> rank(global)	Trend Micro CTF 2016
2016	57 <sup>th</sup> rank(global)	Sunshine CTF 2016
2011	99.7628 percentile	CBSE Proficiency exam

## POSITIONS OF RESPONSIBILITY

### QUARK 2017 | CONTROLS COORDINATOR | BITS PILANI, GOA

April 2016 - April 2017 | Goa, India

One of five coordinators responsible for organizing BITS Goa's annual technical festival. Managed a team of 20 juniors. Contacted and confirmed Indian and international performers and artists for the festival

### BITSKRIEG | CLUB FOUNDER AND COORDINATOR | BITS PILANI, GOA

January 2016 - April 2017 | Goa, India

Founded the cyber security and pentesting club BITSkrieg. Participated in over 30 CTF competitions in 2016 and ranked within the global top 100 in 8 of them

## INTERESTS

Capture The Flag cybersecurity competitions • Hacking scripts to save time • Cheating in PC games through disassembly and memory editing