

Vaibhav Bedi
Mobile No: +91-8950597710
Date of Birth: 14th September 1995
Email: Rob.vaibhavbedi@gmail.com

Correspondence Address
SLS splendor,
Devarabeesanahalli
Bangalore 560103
Karnataka, India



Profile Summary

- Security Engineer with 1.8 years of experience in Embedded System, Internet of Things and medical devices.
- Experience in decoding the modulation signal using GNU Radio, Audacity and Inspectrum.
- Hands on experience with extracting firmware, JTAG exploitation, SPI, I2C, and UART.
- Delivered the talks in various open source communities like NULL Bangalore, OWASP and Test Tribe.
- Love to spend most of my free time in making, breaking and securing IoT devices.

Area of Interest

- ✓ Internet of Things
- ✓ Embedded System
- ✓ Penetration Testing
- ✓ Reverse Engineering

Work Experience

L & T Technology Services | Security Engineer

Jan 2019 – present | Bangalore, India

- Hardware Exploitation

Attify Mobile Security Pvt Ltd | IoT Security Researcher

May 2018 – Nov 2018 | Bangalore, India

- Generated some of the modulation types to send data from Arduino Nano, and then receive it using GNU radio and Gqrx to decode it to the original data.

Tools Used – Arduino nano, Gqrx, Hack RF, GNU Radio-companion, Inspectrum, Audacity

- Has extensive experience in using BTLEjuice for the security of BLE Smart Bulb.
- Used Attify Badge to explore JTAG and extract the firmware of various IoT devices.

Tools & Technologies hands-on with:-

Bluetooth tool – Hcitol, Gatttool, characteristics, Services, Bleah, Bluetooth HCI snoop log.

Contribution

- Performed various attacks on IoT Smart Devices.

Indian Institute of Technology, Mandi | Project Associate (IMPRINT Project)

June 2017 – May 2018 | Himachal Pradesh, India

- A micro fluidic-based point of care testing device for measuring urine albumin using a novel organic dye

Indian Institute of Technology, Indore | Research Staff (Newton Bhabha Programme)

June 2016 – Feb 2017 | Madhya Pradesh, India

- Developing a social network of industrial assets to enable smart decision making.
- Design a Social Network based system of 3D Printer Machine for generalized group-based communication between industrial assets.

Technologies Expertise

- ✓ Radio Waves Hacking
- ✓ Firmware Analysis
- ✓ BLE (Bluetooth Low Energy) Exploitation
- ✓ Vulnerability Assessments
- ✓ Hardware Hacking
- ✓ Web Security

Key Skills

- ✓ C, Python
- ✓ Environment – Linux, windows, Git
- ✓ Open Source Tools – Brupsuite, Wireshark, Nmap
- ✓ Development Board – AVR (Atmega8), Arduino, Esp8266 Raspberry Pi
- ✓ Protocols – MQTT, TCP, HTTP, HTTPS, Zigbee

Education

- ❖ **Kurukshetra University – 2017:**
B.Tech in Electronics & Communication
CGPA score – 7.0
- ❖ **Senior Secondary – 2013:**
UPMSP board with score 83%
- ❖ **Secondary – 2011:**
UPMSP board with score 74.9%

Patent

A system for detecting the biological molecule using the micro fluidic technique.

Application number: 201811047739

Submit Date: 17/12/2018

Status: Pending

Achievements

- Speaker at IoT Show 2019.
- Demonstrated Industry Smart ware Project in IMTEX 2017-Machine Tool Exhibition, Bangalore.
- Won a National Technical Institutes Competition Smart Manufacturing-Industry Smart-ware At Manufacturing Today Conference & Awards 2016 organized by ADITYA BIRLA GROUP.
- Secured 1st position in LIVE-Project competition on the occasion of “TechInvent2k16” at Chandigarh Group of College, Landran.
- Secured 2nd position in Circuit-Mania competition on the occasion of “TechInvent2K16” at JMIT Radaur.
- Secured 2nd position in RAM-ROM competition on the occasion of “TechInvent2K16” at JMIT Radaur.
- Secured 1st position in Business Plan Competition conducted by Entrepreneurship Development Cell at JMIT Radaur.
- Secured 3rd position in Project Exhibition competition on the occasion of “SwarooMM-2017” organized by Maharishi Markandeshwar University Ambala.
- Demonstrated project in Industrial Exhibition on the occasion of “TechInvent2017” organized by Chandigarh

Internship

Cutting Edge Medical Devices Pvt Ltd, Delhi Project

- IR based optoelectronic device for measuring displacement and timer Circuits.

Department of Science & Technology, Delhi Project

- Monitoring the health of UAV in Ground Computer using Mission Planner.