

## Personal Details

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## Education

2016–2018 **M.Tech Computer Science and Engineering (Info.Security)**, Indian Institute of Technology (ISM), Dhanbad, CGPA–7.99.  
2011–2015 **B.E. Computer Science and Engineering**, Bhilai Institute Of Technology, Durg, CGPA – 7.97.  
2010–2011 **CGBSE XIIth Board**, Siddhi Vinayak Hr. Sec. School, Bilaspur, Percentage –82.2%.  
2008–2009 **CBSE Xth Board**, Burgess Higher Secondary School, Bilaspur, Percentage –81%.

## Position and Responsibility

2019-2020 **Member of Technical Staff – 1RND at Mavenir Systems**  
Part of CRAN and FRAN– Project for 5G and 4G technology enhancing and developing L2 layers (RLC).  
2018 **Senior System Validation Engineer at Cypress Semiconductors**  
Worked on WICAT Python Framework for Automation Testing.  
2018 **Summer Internship at Google Summer Of Code.**  
Summer Internship in RTEMS by contributing in open source platform.

## Project

2020 **5G-NR Implementation of DL Throughput counter as per 3gpp specs.**  
Objective: Calculated DL throughput burst for each burst for each QOS/5Qi. Implemented logic to calculate burst then calculated volume of data sent and actual time required to send data.  
2019-2020 **5G-NR Optimized way of sending BO reports from RLC to DL- Scheduler.**  
Objective: Implemented Optimized way of sharing BO reports from RLC of data received as PDCP-SDU to lower levels. Created a cumulative approach of accumulating BO and send single report at the end of each TTI.  
2019 **4G – LTE Developed script to detect data loss for TCP/UDP**  
Objective: Implemented a script which will take input pcaps on different interface to detect any delay or loss in data transfer on data path and resolved various bugs using this.  
2018-2019 **Automation on WICAT framework for MAC OS.**  
Objective: Automated the WICAT framework to run test cases for Bluetooth Chips testing for mac.  
Involved in design and implemented and supported for other Platforms with this framework.

- 2018 **Posix Compliance**  
Objective: To add missing functions and improve performance of various methods in RTEMS and Newlib libraries
- 2018 **Research in Optimizing approach for Collaborative Mobile Charging in WSN..**  
Objective: To optimize a technique known as Collaborative Mobile Charging. Studied and implemented CMC and provided a more detailed optimization in path selection by using MST heuristics.
- 2017 **Research in optimizing no of mobile charger in WSN clusters..**  
Objective: To optimize no of mobile charger in clusters of wireless sensor networks. Studied and implemented nodes and formed clusters of nodes by taking various factor into consideration like Cluster head selection by some algorithm and applied Huffman technique to optimize the no of mobile charger.
- 2017 **Research in IoT Trace Based Probabilistic Resource Estimation at Fog.**  
Objective: To estimate the resource requirements for different type of customers at FOG. Studied different traits of different customers like which are frequent customer, and which are new customers, so we derived a new algorithm to estimate the resources required by them.

## Achievements

- 2018 Selected for Google Summer of Code 2018.
- 2016 Scored 97.5 percentile in GATE(CS) among 108495 appeared students.
- 2013 Qualified for the Finals of Overhaul robotics event in one of the Asia largest techno-management fest Kshitij-2013 organized by IIT-Kharagpur.
- 2010 Secure 2nd position in a State level Scholarship Test in Pt. Rohini Kumar Bajpai Memorial Talent Appreciation Test organized by Siddhi Vinayak educational academy in year 2010.

## Skills Set

Languages C, C++, Python, TCP/UDP, Wireshark, Bluetooth