

LIKITH RANGADHAMAPPA YADAV

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TECHNICAL SKILLS

- **Programming Language:** C, MIPS Assembly, C++, Java, Python, SQL
- **Testing:** Manual Testing, Automation Testing, Selenium
- **Tools:** Simulink, MATLAB, Cadence Virtuoso, Proteus, AutoCAD, Gem5, Logisim, Eclipse, Arduino, Energia, GitHub, IntelliJ
- **Web:** HTML5, CSS3
- **Computer Concepts:** Data Structures, Algorithms
- **Machine Learning:** PyTorch, TensorFlow, Scikit-learn
- **Operating Systems:** Windows, Linux

EDUCATION

Master of Science in Electrical & Computer Engineering

January 2018 – December 2020

Colorado State University, Fort Collins, CO

(CGPA 3.6)

Courses: Computer Organization & Architecture, Hardware/Software Design of Embedded Systems, Machine Learning, Manycore System Design using ML, VLSI System Design, Fault Tolerant Computing, MEMS Devices, Power Electronics, Engineering Risk Analysis, Embedded Systems & Machine Learning

Bachelor of Engineering in Electrical & Electronics Engineering

September 2011 – December 2015

Visvesvaraya Technological University, India

Courses: Logic Design, Micro-controllers, Control systems, Modern control theory, Signal systems, Analog electronics circuits, Digital signal processing, Energy auditing & demand side management, Network Analysis, Management & entrepreneurship

WORK EXPERIENCE

Graduate Student Tutor, Colorado State University:

January 2020 – December 2020

- Guided students to apply the Machine Learning & Fault tolerant computing courses concepts taught by the instructors in class.
- Mentored & assisted the students to prepare for in-class along with the real-world project assignments.

Technical Support Associate Engineer, IBM:

March 2017 – January 2018

- Resolving incidents that involves software issues & managing, data network on client's end using KVM & Citrix environment.
- Collaborated with multiple teams & ensured remote Infrastructure support delivery with performing problem cause analysis.
- Contributed to 8% improvement in product services without violating the SLA in agile driven environment.

Trainee Engineer, Zetamp Energy Solutions Pvt Ltd:

January 2016 – June 2016

- Employing Proteus software, Designed & Performed validation for the embedded PCB modules, like Motor drivers, Sensors, TX, RX, Buck-Boost converters etc.
- Developed code & integrated various embedded modules employing Hardware interfaces & protocols such as UART, I2C, SPI, SD, USB, CSI-2, DSI, Wifi, BLE/BT, TCP/IP, Parallel etc.
- Implemented Agile methodology and coordinated with various departments to integrate, compile & evaluate the end-product by employing RTOS.

ACADEMIC PROJECTS

- **Research on Optimization of GPGPU network on chips:** Reducing the latency, energy and increasing the throughput in network on chips of GPGPUs by optimizing the routers and with the smart placement of optimized memory controllers in the chip
- **Architectural Exploration using GEM5, Noxim, YAML Library, McPACT:** Performed simulation & analysis of cache architecture, hardware exploration of cache in X86 processor, ARM processor for optimized configuration & improved execution time, design space exploration by selecting optimized parameters of selection function, routing protocols, NOC Traffic, Power dissipation, Software optimization techniques for ARM processor
- **Advance level VLSI projects using Cadence Virtuoso:** ASIC Design, ASIC Flows, Large Scale IP Integration, design and analysis of various transistor level components, layout designing and verifying DRC, ERC and LVS
- **Advance level Microprocessor and Microcontrollers programming SOC:** Quantified Expertise in programming, Arduino Uno, Arduino Mega, MSP430, 8086 and 8051 Microprocessors and Microcontrollers
- **Indoor Localization:** Explored, conceptualized and improved the bottle necks of various methods of the techniques
- **Byzantine Fault Tolerance:** Explored effective methods of the byzantine fault tolerance in distributed system
- **Machine Learning Application in Manycore system design:** Explored the effective optimization techniques and applications of algorithms in manycore system design using machine learning techniques
- **ID3 Decision Tree Learning Algorithm:** Built a decision tree using heuristic algorithm for mushroom dataset
- **Simulated Annealing & STAGE Algorithm:** Implemented heuristic algorithms for a network on chip of 64-core homogeneous manycore system using synthetic traffic pattern dataset to optimize the traffic weighted zero-load latency

PUBLICATIONS

- Achieved sponsorship on the paper "Power Generation and Monitoring the Purity Level of Water in Reservoir and Alert System" in **Texas Instrument Innovative India Design Contest 2015** and won **Gandhian Young Technological Innovation Award**. This led me to achieve 1st place in the state level technical paper presentation (**Tech Vidya 2015**)
- **Indo-Dutch International Conference 2014:** Paper titled "Power Generation using Super Magnets" was selected for conference

CERTIFICATIONS

ABC Technologies, Bangalore, India

January 2018

Focused areas: Programming in C, Java, Developing, Testing and deploying the web applications