Sri Subathra Devi B

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ABOUT MYSELF

- Seeking a challenging position which will enable me to continuously learn, create,innovate and simultaneously contribute to goals of the organization effectively using technological & managerial skills.

ACADEMIC DETAILS

Examination	University	Institute	Year	CGPA/%
M.Tech: Communication Engineering	NITK Surathkal	NITK Surathkal, Mangalore	2018	9.75
BE: Electronics and Communication Engineering	Anna University	Panimalar Engineering College, Chennai	2015	9.05
Class XII	CBSE	Kendriya Vidyalaya, GC, C.R.P.F, yelahanka, Bangalore	2011	89.6%
Class X	CBSE	Kendriya Vidyalaya, GC, C.R.P.F, yelahanka, Bangalore	2009	82.8%

TECHNICAL SKILLS

- Proficiency with C and C++ language in Viusal Code Studiov1.57.0 (using GCC compiler).
- Good working proficiency in MATLABv2018b, SIMULINKv1.14, OMNETv5.5.1 and LaTeX.
- Strong knowledge of 4G/5G wireless technologies
- Strong understanding of IP addressing,standard routing protocols and port security.
- Knowledge of data structures and algorithms.
- Good understanding of tools such as: ns-3.27, Cisco Packet Tracerv7.2.2, Arduino IDEv1.8.2, LabVIEWv2014.

PROFESSIONAL EXPERIENCE

Eishaa Networks, Chennai
Designation: Engineer-Network Analytics
Duration: 2 Years (October 2018-Till date)

PROJECT DETAILS:

- **Low power design of Network on Chip (NoC)**
  Phase 1:
  Software used: MATLABv2018b, SIMULINKv1.14
  Project Duration: March 2020- October 2020
  - Implemented conventional Network on Chip (NoC) with XY routing algorithm using SimEvents and Simulink toolboxes in Simulink.
  - Designed and implemented NoC with a reduced number of routers.
  - Implemented RTM routing algorithm for single layer NoC in Matlab code editor and imported to Simulink using SimEvents toolbox.
  - Designed and implemented multi-layer NoC by creating a subsystem and using mask editor in Simulink.
  - A routing table was introduced to externally store and access the destination router address from the spreadsheet to reduce the number of computations.
  - A priority-based packet transmission was implemented using SimEvents and Simulink toolbox in Simulink.

- Created different test case scenarios to test the model and estimate packet delivery ratio and packet drop.

Phase 2:
Software used: MATLABv2018b, SIMULINKv1.14
Project Duration: November 2020-Till date

- A microstrip patch antenna was designed and its radio pattern is obtained for different frequencies using the antenna designer in MATLAB.
- Zigbee model was introduced inside the enhanced NOC model using communication, SimEvents, and Simulink toolbox in Simulink.

- **LTE-A for military applications**
Phase 1:
Software used: OMNET++v5.5.1
Project Duration: October 2018-May 2019

  - Implemented an LTE single core network using INETv4.1.1 and LTE module in OMNET++.
  - Different test case scenarios such as a network with high mobile nodes, static nodes, dense network, and so on were created to check the network performance.

  Phase 2:
  Software used: OMNET++v5.5.1
  Project Duration: June 2019-February2020

  - Modified the existing eNB module by adding UE and EPC modules in OMNET++.
  - An algorithm was introduced to switch the eNB nodes between different states (isolated, meshed, vUE) based on the mobility of nodes and availability of the core network.
  - Reviewed the model and fixed the issues raised during the integration of the module.

ACADEMIC EXPERIENCE

- A project on **"An innovative packet labelling scheme (TCP PLATO) for data center networks."** at NITK, Surathkal as M.Tech. major project.
Software used: ns-3.27, MATLABv2016b
Project Duration: July 2017-June 2018

  - Implemented TCP PLATO, which improves the loss detection capabilities of TCP NewReno, and simulated it for Data Centre Networks (DCNs) for different topologies.

- A project on **"Accident prevention using low cost sensors and USB camera."** at Panimalar Engineering College as B.E. major project.
Software used: Arduino IDE
Hardware used: ARM 11 processor, Arduino, Heart rate sensor, MQ3 sensor
Project Duration: December 2014-April 2015

  - Designed and implemented a system to monitor driver's status to prevent accidents. System was designed to be non-invasive, cost effective and real time.

ACCOMPLISHMENTS

- **AWARDS:**

  1. Received gold medal from NITK Surathkal for securing the highest CGPA in M.Tech. Communication Engineering in the graduation batch of 2017-2018.

- **PUBLICATION:**

  1. "Accident prevention using low cost sensor and USB camera", International Journal of Technical Research and Applications, Volume 3, Issue 2, March-April 2015.

- **PRESENTATION:**

  1. "DNA ROBOT", National Conference on modern Electronics and Signal Processing, NCMESP 14, Velammal Engineering College on 14^{th} March 2014.

- **EXTRA COURSES:**
    1. Completed training program on C and C++ programming by Netmasters.
    2. Completed a course on networking (CCNA) at CTTI, Mangalore.

ACTIVITIES

- Served as a Placement coordinator for the department of ECE-M.Tech. Communication Engineering during the academic year 2017-2018.
- Actively participated as a tutor in the Special Coaching of the First Year B.Tech program during the academic year July-December 2016 at NITK Surathkal.
- Organized "Umbrella Walk" and "Sky Lantern" in Engineer 16, National Institute of Technology Karnataka, Surathkal.
- Organized an event titled "Job Hunt" in National level technical symposium FUERZA 14, Panimalar Engineering College, Chennai.

STRENGTHS

- Self-disciplined, self confident and hard working.
- Co-operative and adjustable nature.
- Willing to learn new things.

DECLARATION

I hereby confirm that the information given above is true to the best of my knowledge.

Date:
Place:

Sri Subathra Devi B