

# Nagarjun. E

MASTER OF ENGINEERING · WEB TECHNOLOGIES

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“Be the master, People will follow you.”

## Carrer Objectives

To seek an opportunity in the areas of Computer Networking, Machine Learning and IoT-based application development in a competitive work environment to utilize my academic skills and perform efficiently in the organization, by engaging in activities that enhance my technical and collaborative skills to help me grow as a professional.

## Profile Summary

- Good academic record.
- Exposure to UI development in Python and HTML.
- Good analytical, collaboration and communication skills.

## Certification Courses

- Complete Python Bootcamp:** Go from Zero to Hero in Python 3, Udemy, Online Course on Oct.7,2019
- Complete Data Science Bootcamp:** Udemy, Online Course, ongoing

## Education

### Postgraduate - University Visvesvarayya College of Engineering(BU)

KR Circle, Bengaluru

MASTER OF ENGINEERING IN WEB TECHNOLOGIES

2017 – 2019

- Secured an aggregate of 83.37%
- Teaching Assistant for Microprocessor Laboratory.
- Research Assistant from Jan, 2019 - Present

### Undergraduate - Atria Institute of Technology(VTU)

Hebbal, Bengaluru

BACHELOR OF ENGINEERING IN COMPUTER SCIENCE

2012 – 2016

- Secured an aggregate of 68.20%
- Stood at second place in Mad adds - 2K14 - Saptrang.

### SCT Polytechnic(DTE)

Vignannagar, Bengaluru

DIPLOMA IN INFORMATION SCIENCE AND TECHNOLOGY

2007 – 2012

- Secured an aggregate of 60.83%

### Govt PU College

Kodigehally, Bengaluru

PRE-UNIVERSITY COLLEGE (PCMB, KARNATAKA PU BOARD)

2012

- Correspondence Course
- Secured 49.83%

### Ashraya High School

Hebbal, Bengaluru

SSLC(STATE BOARD, KARNATAKA)

2012

- Secured 62.56%

## Skills

- Programming Languages:** C, C++, Java, LaTeX, Python
- Web Development:** HTML, CSS, Bootstrap, PHP, Django
- Database Systems:** SQL Server, MySQL
- Operating System:** DOS, Windows 10, Ubuntu
- Softwares:** Git, Eclipse, MS Visual Studio, Pycharm
- Application Servers:** Apache Tomcat, Xamp, Wamp
- Simulation Tools:** NS2, ONE
- Editing Tools:** Photoshop CC-17, CS6, Adobe Premier Pro, After Effects
- Languages:** Kannada, English, Hindi, Telugu

## Areas of Interest

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- Internet of Things
- Opportunistic Networks, Delay Torrent Networks, Wireless Sensor Networks
- Raspberry Pi Systems
- Web Technologies
- UI/UX Developer

## Academic Projects

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### HMCRA: Hybrid Multi-Copy Routing Algorithm for Opportunistic IoT Network

UVCE, Bengaluru

MAIN CONTRIBUTIONS OF THE PROPOSED WORK

Jan. 2019 - Nov. 2019

- Selecting potential nodes among various available nodes to disseminate message using fuzzy logic. Fuzzy rules formulation based on energy, speed and distance.
- Finding reliable and optimal route to deliver message from source to destination using GA.
- Optimizing various IoT network parameters like delivery probability, latency, hop count and overhead ratio in an opportunistic scenario.
- Developed in ONE Simulator, Tools : Eclipse, Language : Java

### EASM: Energy-Aware Sink Mobility Algorithm to Prolong Network Lifetime in WSN

UVCE, Bengaluru

MAIN CONTRIBUTIONS OF THE PROPOSED WORK

Aug. 2018 - Mar. 2019

- The aim of this work is to collect data from all sensor nodes, aggregate and forward to cloud.
- Implemented through reconstructing the network and creating new routing paths in the network
- The sink node moves to a new safe location, neighboring nodes having more residual energy when sink current neighboring node's residual energy reaches threshold level
- To prolong the network lifetime
- Developed in Matlab

### Lifetime Maximization of IoT Network by Optimizing Routing Energy

UVCE, Bengaluru

MAIN CONTRIBUTIONS OF THE PROPOSED WORK

Jan. 2018 - Aug. 2018

- To find the optimal cluster head (CH) for mobile nodes in IoT network.
- MAWCA considers degree difference of the node, sum of differences between neighbors, cumulative time, nodes mobility and delay in choosing a CH as weighting factor during CH election process.
- Developed in NS-2 Simulator, Language: C++

## Publications

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### CONFERENCE

- Hemanth Kumar, Nagarjun E and S.M. Dilip Kumar, "**EASM: Energy-Aware Sink Mobility Algorithm to Prolong Network Lifetime in WSN**", *1 IEEE India Council International Conference (INDICON 2019)*, Dec 2019. (To be published in IEEE Xplore)
- Srinidhi NN, Nagarjun E and S.M. Dilip Kumar, "**HMCRA: Hybrid Multi-Copy Routing Algorithm for Opportunistic IoT Network**", *2019 International Conference on Smart Systems and Inventive Technology (ICSSIT), Tirunelveli, India*, ISBN: 978-1-7281-2118-5, Nov 2019, pp. 370-375.
- Srinidhi N N, Sunitha G P, Nagarjun E, Shreyas J and Dilip Kumar S M, "**Lifetime Maximization of IoT Network by Optimizing Routing Energy**", *IEEE international Women in Engineering (WIE) Conference on Electrical and Computer Engineering 2019 (IEEE WIECON-ECE)*, Nov 2019. (To be published in IEEE Xplore, ISBN: 978-1-7281-4499-3).

### JOURNAL

- Srinidhi NN, Nagarjun E and S.M. Dilip Kumar, "**Hybrid Algorithm for Selecting Efficient Node and Path for Opportunistic IoT Network**", *Journal in progress..*
- Srinidhi NN, Nagarjun E and S.M. Dilip Kumar, "**Establishing Self-Healing and Seamless Connectivity among IoT networks using Kalman Filter**", *Journal in progress.*

## BOOKS

- Nagarjun E, "Nagarjun's Quotes: For Life", Sold by: Amazon Asia-Pacific Holdings Private Limited, **Language:** Kannada and English, **ASIN:** B07ZRKBYW2, **Format:** Kindle Edition and Paperback **ISBN-10:** 1703900170, **ISBN-13:** 978-1703900170, October 30, 2019 (Published).

## Presentation

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### International Conference on Smart Systems and Inventive Technology (ICSSIT 2019)

Tirunelveli, India

PRESENTER FOR <HMCRA: HYBRID MULTI-COPY ROUTING ALGORITHM FOR OPPORTUNISTIC IOT NETWORK>

Nov. 2019

- IEEE Conference

### IEEE international Women in Engineering (WIE) Conference on Electrical and Computer Engineering 2019 (IEEE WIECON-ECE)

Sterlings Mac Hotel, Bengaluru

PRESENTER FOR <LIFETIME MAXIMIZATION OF IOT NETWORK BY OPTIMIZING ROUTING ENERGY>

Nov. 2019

- IEEE Conference

## Workshops Attended

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- Participated in One-Week workshop on Block chain Technology 26 - 30 August, 2019.
- Participated in One-Week Faculty Development Programme on Artificial Intelligence and Machine Learning Feb-28 - March 07, 2019.
- Participated in One-Week Faculty Development Programme on Internet of Things and Big Data Analytics 24 - 30 July, 2019.
- Participated in the Personality Development Workshop conducted by Disha at UVCE.

## Extracurricular Activity

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- Received Rajyapuraskar Award in Scout and Guides.
- Worked as an Associate Director For a Kannada Movie(Birth).
- Designed Banners and Certificates for College Functions.
- Participated in Kagathon as a part of Kagada 2018 conducted by IEEE UVCE.
- Volunteered during the Second Talent Search Award Program at NIAS, IISC Bengaluru.
- Participated in Mad acts competition and bagged 2nd prize(Atria Institute of technology)
- Volunteered during Release of Special Postal Cover on the Occasion of Centennial Celebrations of UVCE.
- Volunteered during the One Day Workshop on Systematic Voters Education and Electoral Participation for Differently abled Youth, 09th April 2019
- Director for Kannada Web-Series called "Nagisuva Tonic " and also worked as Cinematographer and Editor for Two Short-Movies.