Naresh Kumar D

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EDUCATION

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI, INDIA.   **2016-2020**
BACHELOR OF TECHNOLOGY

NARAYANA JUNIOR COLLEGE, HYDERABAD, INDIA.   **2014-2016**
12TH GRADE – 98.7%

FATHER'S MODEL HIGH SCHOOL, HYDERABAD, INDIA.   **2004-2014**
10TH GRADE – CGPA 10/10

RESEARCH INTERESTS

Computational Linguistics, Computer Vision, Natural Language Processing, Deep learning, Semantic Web, Human-Computer Interaction, Statistical Modelling.

PUBLICATIONS

1. Pushpa C. N., **Naresh Kumar D,** SanthanaVijayan A, *Improving Web Service Discovery by Hybridization of Ontology Focused Concept Clustering and Interface Semantics,* submitted for a **SCOPUS-indexed**, *Journal of Information & Optimization Sciences,* **Taylor and Francis Series**.*(SUSCOM-2019), (Corresponding and Presenting author).*

2. Gerard Deepak, **Naresh Kumar D,** SanthanaVijayan A, G VSN Sai Yashaswea Bharadwaj, *OntoQuest: An Ontological Strategy for Automatic Question Generation for e-assessment using Static and Dynamic Knowledge,* Accepted for the **Fifteenth International Conference on Information Processing (ICInPro) – Dec 2019, IEEE.** *(Corresponding and Presenting author). doi : 10.1109/ICInPro47689.2019.9092034*

3. **Naresh Kumar D,** Sairam H, P Siva Sai Kumar, A SanthanaVijayan*, A Novel Approach for Ontology Focused Inter-Domain Personalized Search based on Semantic Set Expansion,* Accepted for **Fifteenth International Conference on Information Processing (ICInPro) – Dec 2019, IEEE.** *doi : 10.1109/ICInPro47689.2019.9092155*

4. **Naresh Kumar D,** Gerard Deepak, SanthanaVijayan A, *A Novel Semantic Approach for Intelligent Response Generation using Emotion Detection Incorporating NPMI Measure***,** International Conference on Computational Intelligence and Data Science, **(ICCIDS-2019),** Procedia Computer Science Journal, Elsevier. *doi : 10.1016/j.procs.2020.03.320*

5. Gerard Deepak, **Naresh Kumar D,** SanthanaVijayan A, *A Semantic Approach for Entity Linking by Diverse Knowledge Integration incorporating Role-Based Chunking*, International Conference on Computational Intelligence and Data Science, **(ICCIDS-2019),** Procedia Computer Science Journal, Elsevier. (*Presenting author)* **Accepted and Presented.** *doi : 10.1016/j.procs.2020.03.339.*

6. SanthanaVijayan A, **Naresh Kumar D,** Gerard Deepak, *A Semantic-Aware Strategy for Automatic Speech Recognition incorporating Deep Learning Models,* International Conference on Soft Computing and Signal Processing, **(ICSCSP-2019),** Advanced Intelligent Systems and Computing (AISC), SCOPUS. *(Corresponding and Presenting author)* **Accepted and Presented.** *doi : 10.1007/978-981-15-2475-2_34*

7. SanthanaVijayan A, **Naresh Kumar D,** *A Novel Hybridized Strategy for Machine Translation of Indian Languages,* International Conference on Soft Computing and Signal Processing, **(ICSCSP-2019),** Advanced Intelligent Systems and Computing (AISC), SCOPUS. *(Corresponding and Presenting author)* **Accepted and Presented.**

COURSES TAKEN/CREDITED COURSES

Numerical Techniques, Transforms and Partial Differential Equations, Network Security.

COURSES AUDITED/ONLINE COURSES

Data Engineering Professional Certificate (Coursera), Data Structures and Algorithms (NIT-Trichy), Operating Systems (NIT-Trichy), Data Base Management Systems (NIT-Trichy), Computer Organisation (NIT-Trichy), Data Structures and Algorithms (National Research University Higher School of Economics, Coursera), Machine Learning (Stanford University).

RESEARCH EXPERIENCES

NIT-Tiruchirappalli (Department of Computer Science and Engineering)
Research Associate – August'19 – Present
Guide: A SanthanaVijayan

- Book Chapter on **Course Recommendation For Various E-Learning Platforms Incorporating Semantic Modelling** encompassing deep-learning techniques.
- Works are in the initial stages and the project will be published in **IGI – GLOBAL PUBLICATIONS.**
- Platform independent model will be synthesised which should outperform various existing methods.

NIT-Tiruchirappalli (Department of Computer Science and Engineering)
Research Associate – June'19 – July'19
Guide: A SanthanaVijayan

- *Emoji Prediction from Twitter data using Machine Learning techniques.*
- A text classification problem, mapping input text to their most likely accompanying emoji, utilizing close to 100,000 scraped Twitter tweets for our training set.
- Stochastic Gradient Classifier, Multinomial Naive Bayes' Classifier, Gaussian Naive Bayes' Classifier and Random Forest Classifier have been employed for the implementation.
- It was observed that the Random Forest Classifier gives the best accuracy of close to 56% with a runtime of 35.5 seconds.

University Visvesvaraya College of Engineering, Bangalore University, Bengaluru
Research Associate – May'19 – June'19
Guide: Pushpa CN (Co-Chair WIECON-ECE-2019)

- *Query Recommendation system to support exploratory search.*
- Queries that have been submitted in the search goal shift processes are extracted from search engine logs using machine learning. Next, the queries are used to build a search goal shift graph.
- The random walk algorithm is finally used to obtain the query recommendations in the search goal shift graph. The effectiveness of the chosen methods for exploratory search is demonstrated by comparing them with other methods.
- Word2Vec, Semantic Regularization have been incorporated into the model successfully.

SOFTWARE SKILLS

Operating Systems: Windows, Linux (Ubuntu), MAC-OS-X
Programming Languages: Python, C++, C, MATLAB
Software Tools: WebProtègè, Android Studio, AutoCAD, LaTeX

AWARDS AND EXTRA-CURRICULAR ACTIVITIES

- *Best Paper Award*, International Conference on Information Processing, ICInPro, ID : 41.
- *Honorary Rosalind membership at London Journal Press* for my published work in Procedia Computer Science. Membership ID *#CS52299.*
- Marketing Team, **Synergy'19** – The National level Mechanical Engineering Symposium.
- Events team, **Pragyan'19** – The ISO 9001: 20121 certified techno-managerial fest of NIT-Trichy.
- Captain of **NITT-Cricket team**, Standalone and Recognised team of NIT-Trichy.