Ramesh Nadavati

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Interests

Big Data, Data Mining, Machine Learning, Internet of Things (IoT).

# Education

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| June2016 | **Master of Science**, Computer Science and Information System  University of Michigan; Flint  Advisor: Dr. Murali Mani |
| May 2014 | **Bachelor of Technology**, Electrical and Electronic Engineering  SITE, Jawaharlal Nehru Technological University Anantapur  Honors in Electrical and Computers  Minor in Mathematics  Advisor: Late prof. G. Sanjanna, Prof. A. Sandya Sri |
|  | Experience |
| Fall 2011 | **SITE**, Andhra Pradesh, India  Employee | Linux/Unix, Network Administrator, System Administrator  Working on installing and updating software’s, windows. Providing access, connection, performances etc.. as a Network Admin. Backups and restores, as a System Admin. Giving support to the students and professors in the university. Installing and Configuring Configuration management tools like Zenoss and Nagios etc. |
| Summer 2013 | **Microsoft Research**, Madras, India  Summer School on Wireless Networks  Attended a Summer School on topics such as Random matrix theory and wireless  networks, Stochastic geometry for wireless networks.  Secured 8th*/*90 in the Random matrix theory and wireless networks among Summer School participants. |
| Summer 2014 | **Microsoft Research**, Madras, India  Summer School on 1. Statistical physics methods in coding/info theory 2. Mesoscopic perspective on network dynamics.  Attended a Summer School on topics such as physics methods in coding, developing those methods pre results in Matlab Simulink. Deep research in advanced network dynamics and mesoscopic perspective on network dynamics.  Secured 2nd place among 95 for driving the methods into results in the Matlab Simulink software. |
| Summer 2012 | **RTTP**, AP, India  Internship | Junior Network and System administrator, Substation Control Engineer.  Responsibilities are providing access, control and maintaining register for noting the distribution of power quality. Every hour checking the substation readings and calculating the amount of power loss etc using network theory concepts. Responsible for submitting the documents on every day to the manager. |
| Fall 2013 | **S.V. University College of Engineering**, AP, India  Research Intern | Databases and Algorithms | Guide: [Prof.](http://www.imsc.res.in/~meena/) G.Sanjanna  Worked on the problem of sorting and searching the list of students based on their qualifications in different aspects and their Bio’s.  Explored new possibilities of improving the current best list of students and their qualifications list: Developed and re-designed some links and gave options to search proper student details in mean time |

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|  | Research |
| – 2014 | **Bachelor’s Thesis**, Dc-Distribution Application | Guide: [Prof. M.](http://www.cse.iitb.ac.in/~sudarsha/) Purushotham  In a dc-distribution system, a bidirectional inverter is required to control the power flow between dc bus and ac grid, and to regulate the dc bus to a certain range of voltages. A droop regulation mechanism is required, according to the inverter inductor current levels to reduce capacitor size, balance power flow, and accommodate load variation is proposed. Since the PV array voltage can vary from 0to600v, especially with thin-film PV panels, the MPPT topology is formed with buck and boost converters to operate at the dc-bus voltage around 380v. |
|  | Talks and Seminars |
| May 2016 | **Big Data for small formers**  UM; Flint |
| Sep 2015 | **Table Functions in Oracle**  UM; Flint |
| May 2015 | **Machine Learning Concepts**  UM; Flint |
| Jul 2014 | **Sketch-based algorithms in Machine Learning**  UM; Flint |
| May 2013 | **Nature of Solar energy and wind energy**  Site Tirupathi |
| Nov 2013 | **Cloud Computing**  S.V. University Tirupathi. |
|  | Teaching |
| Winter 2016 | Database Design, Unix, Visual Basic, Oracle Databases DBMS, SQL, PlSQL, Algorithms, Python, Java Basics.  Graduate Teaching Assistant at tutor lab |

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|  | Honors and Awards |
|  | Achieved 2nd rank in Ramanujan Mathematics and competitive test among all the  departments in the university. |
|  | Recipient of the Research Scholarship under SVU Funding’s, in 2012 |
|  | Secured 2nd position in the State Level Regional Mathematics Test. Recognized and Certified as among 0.1% students, in the Maths, Physics, Chemistry in 2006. |
|  | Received an award in “two days Robotic Challenge” for the successful completion of coding for “street follower robot using hand controllers”. |
|  | Received multiple awards for best dance performances. |
|  | Received best outgoing student award for excellence in academics and cultural activities. |
|  | Projects |
| June 2016 | **SAE Baja Team:** University of Michigan; Flint.  Here me and my team is putting efforts towards designing the new cheapest car with high flexibility and mileage. |
| Winter 2015 | **Table Functions in Oracle and their performances**  Reviewed the performance of table functions in oracle and output ranges using pipelined and parallel methods. The tested dataset is giving faster output than the normal execution of dataset. We understand and concluded that the parallel and pipelined methods helps for faster execution. |
| Winter 2016 | **Creating connection between Java and Database.**  Here my task is to obtain results in Eclipse by writing programming code in java and creating tales in DBMS. I completed my task using Java link connection to DBMS and performed the required task obtained required results. |
| Fall 2015 | **Machine learning concepts in recognition of Face and Iris |IR |Guide:Dr. M.Farmer**  Worked on machine learning concepts related to Biometric recognition, for this project reviewed almost 40 articles and understood some important concepts. Final report submitted to the professor by including major concepts related to the biometrics research and performed testing the professor dataset and made some corrections. |
| Spring 2015 | **Texture Synthesis by Non-Parametric Sampling**  Here, Modelled texture as a Markov Random Field where the texture synthesis process grows a new image outward from an initial point, one pixel at a mean time. |
|  | Leadership Positions |
| – 2014 | **Head of in class Mathematics Forum and C R for Department**, SITE Tirupathi  Part of the Department Undergraduate Committee; Here we deal the unsolved and complicated problems, R&D Dept.; led a team of 23 mentors and the Dept. [96 students] |
| – 2014 | **Conducted workshops, speeches and events,** SITE Tirupathi  Conducted workshops related to the robotics and embedded engineering etc.. conducted many events related to the academics, meet & great functions etc.  Responsible for taking care of 7 freshmen students focusing on their academic development and leading the Anti Ragging Squad in the university. |
| – 2016 | **Member at Indian student ambassador’s**, U of M USA  My responsibilities are interacting with fresher’s and junior students. Helping them in finding the houses for rent, explaining the rules and regulations in the usa. Taking them to grocery stores etc.. |
|  | Technical Skill Set |
|  | Programming Languages: C, Python, Java,  Statistical Computing: Matlab,  Miscellaneous: MySQL, Oracle, SQL, PLSQL, HTML, CSS, LATEX, Prolog |
|  | References |
|  | *\* contact details are available upon request.*  **Prof. Dr. Michael Farmer Prof. Dr. Murali Mani**  U of M; Flint, USA U of M; Flint, USA  Computer Science HOD Computer Science Program Associate  **Prof. A. Sandyasri Prof. K.Ramakrishna**  SITE Tirupathi SITE Tirupathi  BSE Engineering BSE Engineering |