

MANOHAR KATAM

Phone: +1 (682) 256 9202

Email: mxk164930@utdallas.edu

Web Page: <http://utdallas.edu/~mxk164930/>

LinkedIn: <https://www.linkedin.com/in/manohar-katam/>

GitHub: <https://github.com/kmreddyhyd>

Work Authorization: F-1; Available: Seeking Internship/Coop for Winter/Spring/Summer 2018 (part time/full time)

EDUCATION

Master's in Computer Science	The University of Texas at Dallas	GPA: 3.904/4.0	Expected Dec 2018
Coursework: Machine Learning Big Data Management & Analytics Analysis of Algorithms & Data Structures Database Design Web Programming Languages Advanced Computer Networks Operating System Concepts Object Oriented Analysis and Design Design and Analysis of Computer Algorithms			
Bachelor's in Electronics	Indian Institute of Space Science and Technology	GPA: 3.71/4.0	Jul 2011 – May 2015

TECHNICAL SKILLS

- Programming	: Java/J2EE, C, C++, Python, SQL, PHP, Java Servlets and JSP
- Web Programming	: HTML5/XHTML, XML, CSS3, JavaScript, Bootstrap, jQuery, Ajax, SOAP, RESTful web/micro services
- Frameworks	: Spring, Angular4, ExpressJS, NodeJS
- SQL/NoSQL Databases	: MySQL, SQL server, MongoDB, Cassandra, HBase
- Big Data technologies	: Hadoop MapReduce, Apache Spark (Scala/Pyspark), Pig, Hive, SparkSQL, SparkMLlib, R
- Network Protocols	: LAN, TCP/IP, OSI model, ARP, RIP, OSPF, BGP, TCP, UDP, DHCP, DNS
- Operating Systems	: Windows XP/7/8/10, Linux (CentOS, RHEL, Ubuntu), Macintosh

WORK EXPERIENCE

Software Developer Engineer	Indian Space Research Organisation (ISRO), India	Jul 2015- Jul 2016
<ul style="list-style-type: none">- Designed and developed a dashboard for collecting and processing DDOR data of Mars Orbiter Mission (MOM) Satellite.- Developed python codes for automatic posting of look up angle files configuration files of satellite to new antenna servers.- Designed and implemented GSAT satellite communication customer mediation and billing system platform in Java.- Responsible for providing uninterrupted TTC and Payload data reception support for MOM, Astrosat-1 and Cartosat-2C.- Involved in performing test and evaluation of ground station parameters such as G/T, Long loop simulations and star tracking performance (in both S&X-band) of D18, D32 and D10 meter antenna terminals.		
Environment: Java, Python, RHEL 5 & 6, Networking		
Web Page Developer	University of Texas at Dallas	Jan 2017- May 2017
<ul style="list-style-type: none">- Designed and developed a web page for prof. Dr. Yvo Desmedt, by LaTeXing his research papers and later converting them to JSON format to render them through HTML pages. Used Angular Framework to design Single Page Application.		
Environment: XHTML/HTML5, XML, CSS3, Angular, JSON		
Teaching Assistant	University of Texas at Dallas	Aug 2017- Present
<ul style="list-style-type: none">- Assist Undergraduate students in the Course- Programming Fundamentals (CS1134/CS 1136). Helping students in programming with high level languages (Java/JavaScript).		

ACADEMIC PROJECTS

Gift Registry web application (SOA Architecture, Spring, Apache Tomcat, Memcache, RESTful web & micro services)	Fall 2017
Developed a Gift Registry web application with service oriented architecture principles where each functionality has its own RESTful web service and corresponding micro services running on Apache Tomcat server. Used memcache for caching the frequently visited static pages, gzip for compression and used SSL encryption for HTTP request and responses.	
Training and Placement Job Portal site (Bootstrap, JSP, Java Servlets, Java, MySQL, GRASP, MVC)	Fall 2017
Designed and developed the Job Portal web application. Used Objected Oriented approach which has applicant, employer and admin as actors. Derived use cases, UML diagrams, sequence and class diagrams and applied GRASP design patterns with MVC architecture.	
KDD CUP-2017, Highway Tollgates Traffic Prediction (Python, SparkMLlib, SparkSQL, Spark Cluster)	Summer 2017
Analysed the trajectories, links, routes, weather and volume data, and estimated the average travel time from designated intersections to tollgates and predicted average tollgate traffic volume using linear and gradient boosted tree regression.	
DrivenData Competition, DengAI Disease Predictions (R, Machine Learning Algorithms)	Spring 2017
Developed scripts in R language for pre-processing the DengAI dataset and performed analysis using Deep Learning, SVM, Random Forest, kNN, Bagging and Gradient Boosting classifiers and secured 11th position in the competition.	
3-tier e-commerce web application (HTML, CSS, Bootstrap, JavaScript, jQuery, Ajax, JSON, PHP, MySQL)	Spring 2017
Designed and developed a fully functional 3-tier e-commerce application constituting of costumer and user maintenance with multiple shipping/billing addresses and payment details per customer, categories, brands and products maintenance, cart, orders, shipments and returns management and subscription orders with due dates management.	
Fog Computing in IoT (Java, Multi-threading, Synchronization, Collections)	Fall 2016
Developed and implemented following protocols on fog node: a) Forwarding or Processing of an IoT request based on ForwardLimit, VisitedNodes and MaxResponseTime, b) Periodic ResponseTime updates between neighbour fog nodes c) Best Neighbour determination based on VisitedNodes and MaxResponseTime and d) Cloud node processing.	