VARUNYA MADINENI

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EDUCATION:

Master of Science – Computer Science (pursuing)

University of Oklahoma, Norman, OK   GPA-4   Aug '18 – May'20

Bachelor of Technology –Electronics & Communication Engineering

VNR VJIET, Hyderabad, India   CGPA - 8.87/10   Aug '12 – May'16

SKILLS:

- **Programming Languages:** C, C++, Java, Python, Embedded C, Verilog HDL
- **Web Technologies:** HTML, CSS, JavaScript, PHP.
- **Databases & Handling Tools:** RBDMS, SQL, R-studio, Informatica, Excel
- **Software Environments:** MATLAB, Lab View.
- **Technologies:** IBM middleware technologies (WMQ, IIB, IBM DB2, MQFTE).
- **Version Control System:** GitHub, SVN
- **Configuration Tools:** Jenkins
- **Scrum Management Tool:** JIRA.

WORK EXPERIENCE:

Graduate Research Assistant: Jan'19-April'19

- Worked in developing fast Model Predictive Control algorithms used in autonomous vehicles in C++
- Worked on code optimization to increase the performance.

Systems Engineer, Tata Consultancy Services   August'16 –Jun'18

- Over 2 years of IT exposure in DevOps and Enterprise Middleware with hands-on working in Jenkins, Eclipse IDE, IBM Integration Bus (IIB), IBM WebSphere MQ. Acquired and implemented the whole Software Development Life Cycle (SDLC) end to end throughout the career. Gained good knowledge in Development, Enhancement, Implementation, Maintenance and Testing.
- Experienced in all project phases using Waterfall and Agile Methodologies.
- Good knowledge of ESQL language, used in middleware technologies to define and manipulate data within a message flow. Developed many end-end message flows for transformation of business data with SAP as master ERP application.
- Set up a master-slave configuration in Jenkins for two middleware technologies.
- Wrote and enhanced ansible scripts to deploy various components includes bar, MQ in different environment servers till production using Continuous Integration (CI) and Continuous Development approach.
- Good knowledge of Source code Management – GitHub. Proficient in analyzing and translating business requirements to technical requirements.

Assistant System Engineer Trainee, Tata Consultancy Services   July'16-August '16

- Trained on SQL, Informatica.
- Performed a small case study by evaluating the key performance indicators to implement SCD type 1 & type 2 using ETL- informatica & SQL. Also generated the sample reports from the data obtained from these ETL task using Power BI to analyze the growth of the Telephone Company.

PROJECTS:

Redactor & Unredactor:
- Implemented Named Entity Recognition model (NER) to redact the sensitive information like names, age, phone number etc., in plain text documents using Python NLTK and concepts of Text Analytics.
- Designed Unredactor to detect the redacted information using Classification models in Python.

Hospital Service Management System:
- Designed and developed Hospital Service Management System using HTML, CSS, JavaScript, PHP & MySQL. as a whole.
- The project is about the hospital website where patients can register and book an appointment with the doctor. Patients can also check for insurance availability in the hospital
- User profile is created using registration page and their details or records are stored in database for future use. With HTML, CSS & JavaScript on front end and PHP& MySQL on server side.

Compiler Design:
- Designed and implemented main parts of Compiler i.e. Lexical Analyzer & Syntax Analyzer in Python which takes any input with a set of predefined keywords and rules.
- Lexical analyzer breaks the source program into sequence of tokens, whereas Syntax analyzer checks the syntactical structure of the given input.by forming parse tree

House Price Prediction:
- Implemented a model to predict housing prices using machine learning Regression Algorithms in R studio.
- Data preprocessing like replacing the missing values with mean & median values for the feature was done.
- Performed Exploratory data analysis and identified the main features which effected the house prices.
- The model is evaluated with RMSE. The RMSE was 0.160 which was obtained for Ridge Regression.

Motion Detection and Image capturing:
- Developed a prototype of the cost-effective security system for both residential and commercial usage, which can enhance the safety by capturing the image whenever there is any change in sensor's surroundings connected to Pi using Python.

Implementation of model RADAR for Target distance Identification:
- Designed an intelligent device using Raspberry Pi that can be used in automobiles to detect the obstacles using Python & MATLAB.