RAHUL JOSHI

1748 N Hillside street, Wichita 67214 | Cell: (682)552-1745 | rahul18joshi@gmail.com |

SUMMARY:

Over 1.5 years of Quality engineer work experience.
Two years of teaching assistant experience and one year of research assistant experience.

EDUCATION:

PhD in **Industrial Engineering(GPA 4.0):** *Wichita State University, Wichita, KS [August, 2021 –]*

Master of Science in **Operations Research (GPA 3.55):** *Southern Methodist University, Dallas, TX [August, 2019 – May 2021]*

Master of Science in **Industrial Engineering (GPA 3.595):** *University of Texas at Arlington, TX [August, 2014 - August, 2016]*

Bachelor's in **Production Engineering:** *Sinhgad college of engineering, University of Pune, India [July, 2010 - May, 2014]*

COURSES LEARNED:

Linear Programming, Integer Programming, Data Mining, Operation Research, Applied Regression Analysis, Design of Experiments (DOE), Categorical optimization, Supply chain and inventory optimization, Linear regression, Analytics for decision support, Quality Systems, Production and inventory control system, Quantum computing, Metrics and measurement, Neural Network and Deep learning.

TECHNICAL SKILLS:

CAD	**:**	SolidWorks, AutoCAD, PTC Creo(ProE).
Simulation	**:**	Lanner WITNESS, Simio,
Statistical	**:**	SAS, Minitab, AMPL, CPLEX, Design expert, Tableau
Programming	**:**	C, R, Python, MySql, Matlab

PROFESSIONAL & RESEARCH EXPERIENCE:

Graduate Research Assistant *Wichita State University, Wichita* [08/2021 – Current]

- Currently working on research for Industrial Assessment Center, a Department of Energy initiative.
- Working on a project "Estimating and Optimizing HVAC Energy Costs in Industrial Building" which involves creating a model able to disaggregate HVAC system energy usage in industrial building with respect to weather conditions using inverse linear regression and then minimizing it using integer linear programming and weather forecast achieved by LSTM neural network.
- Working on expanding previous research work done on load scheduling and resource allocation in resilient communities by incorporating uncertainty in input parameters and performing robust optimization.
- Involved in IAC visit to perform energy assessment in manufacturing facility and drafted multiple recommendation documents for lighting system, compressor system and boiler room.

Graduate Teaching Assistant *Southern Methodist University, Dallas* [09/2019 – May 2021]

- Taught Engineering Economy (EMIS 2360) lab sessions, Introduction to data science (EMIS 1300) lab sessions and Computing technology (EMIS 1305) to undergraduate students and was also responsible for grading assignments.
- Taught basic machine learning topics such as regression, classification and clustering techniques using Rapid Miner software and assisted on sql assignments using sqlite software.
- Also served as a teaching assistant for EMIS 4395/ Senior Design lab and assisted students with queries in machine learning and any coding in R & python.

Quality Engineer *Pro QC International [*07/2017 – 06/2019]

- Performed pre-production first-piece inspection and testing on field job sites as specified by company on a case-by- case basis.
- Developed Gage R & R Protocols/ Reports (Attribute and Variable) for the Manual Manufacturing Measurements with feature inspection.
- Verified compliance to customer drawings specs and additional requirements.
- Developed Standard Operating Procedures (SOPs)

Graduate Research Assistant *University of Texas at Arlington, TX* [04/2015 – 06/2015]

- Worked in a team to select methods and perform them for benchmarking RFID tags from different manufacturers for its efficiency, durability under different physical environments.
- Researched and contributed in the published article "Performance and Benchmarking of Multi-Surface UHF RFID Tags for Readability and Reliability" in Journal of Sensors.

Engineering Intern *Mandar Engineering corp., Pune, India* [06/2013 - 08/2014]

- Carried out senior year research project at the manufacturing company which involved researching on Delta robot related kinematics, linear programming, and geometric programming.
- Led a team of five members to design, build a Delta robot for the purpose of pick and place applications.
- Developed two dimensional and three-dimensional graphical designs, sheet metal parts and assemblies of the delta robot using SolidWorks as per the constraints.

ACADEMIC PROJECTS:

- **Researched about deep learning/ neural networks (ANN, RNN and CNNs) and writing R codes to build models using UC Irvine repository datasets (image classification and time series models) under the supervision of Dr. Halit Uster in EMIS department of Southern Methodist University.**
- **Project on use of predictive and descriptive analytics to analyze underperforming New York high schools in SHSAT scores using R.**

- **Project on constructing a heuristic and constructing exact optimization problem maximizing the total score under time and budget constraint for custom orienteering problem.**

- **Wrote a code to solve revised simplex method with the capability to handle degeneracy and large number of constraints and dimension in R.**

- **Performed design of experiment and ANOVA analysis using design expert software in order to find the effects of different controlled factors on hand grip strength motivated by need for finding optimal weightlifting techniques for hypertrophy.**