

Jyotsna Rathee

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Summary

Seeking to serve an organization which provides challenging assignments to bring out the best of creative potential and also gives an environment to constantly learn new things.

Educational qualification

- Ph.D. Pursuing from DCRUST, Murthal, Sonapat (since January, 2020).
- M.Tech in Software Engineering from UIET, MDU, Rohtak, Haryana with a percentage of 81.5%.
- B.Tech in Computer Science and Engineering PDM College of Engineering for Women, MDU, Rohtak, Haryana with a percentage 66.9%.
- Intermediate (XII, CBSE) from St Thomas School, Bahadurgarh, Haryana with an aggregate of 74.2%.
- Matriculation (X, CBSE) from St Thomas School, Bahadurgarh, Haryana with aggregate of 83.2%

Experience

1. Assistant Professor

Maharaja Surajmal Institute of Technology (MSIT) -4, Janakpuri, New Delhi

3rd August, 2018 – 31st May, 2019

15th July, 2019 – 20th December, 2019

13th January, 2020 – 13th March, 2020

Responsibilities Handled

- Lab in charge of networking lab
- Proctor & Mentorship
- Conducted classes on Data communication and networks, and switching theory and automata
- Lab in charge of networking lab
- Conducted lab for switching theory and automata
- Part of ISO and NBA Team of IT Department
- Creative head of department

2. Senior Project Assistant

Industrial Research and Development Unit (IRD) IIT Delhi, Hauz Khas, New Delhi

18th May, 2017 – 29th June, 2018

Responsibilities Handled

- Study on educational model for visually impaired, evaluate and assimilate various methods for conversion of textbooks diagrams in tactile form.
- Research on various diagram conversion approach involving user testing and feedback to obtain a comprehensible diagram approach for the visually impaired individual.
- Using Design thinking and projection analysis for conversion of perspective image to 2D drafting.
- CAD modelling involving conversion of vector graphics to STL (suitable for rapid prototyping)
- Using rapid prototyping, embosser and forming machines for functional testing of design concepts.

3. Assistant Professor (Part Time)

Meera Bai Institute of Technology Maharani Bagh, New Delhi

February, 2016 – May, 2016 (4 months)

Responsibilities Handled

- Creating and Modifying database objects
- Performing database operations in a procedural manner using pl/sql
- Performing database operations (create, update, modify, retrieve, etc.,) using front end tools
- Design and Develop applications like banking, reservation system, etc.

4. Lecturer (Part Time)

Kasturba Polytechnic for Women Muni Maya Ram Marg, Pitampura, Delhi

January, 2016 – April, 2016 (4 months)

Responsibilities Handled

- Conducted Computer Graphics lab with an objective to educate students on C concepts underlying modern Computer Graphics and Machine Vision.
- Generic skills to design algorithms for digital image synthesis.
- 2D geometric transformations, Algorithms for clipping, 3D geometric and modelling transformation, Illumination models and surface rendering methods etc.

Skills

- Professional skills: Analytical and Problem solving, Leadership/Management, Interpersonal Effectiveness, Strong work ethics
- Software Skills: Python, Arduino, C, C++, JAVA, HTML
- OS Windows, Linux

Achievements

- Educational- Cleared HTET
- Educational- Winner in Science Exhibition
- Non-Academic- Certified NCC “BEE” and “C”
- Non-Academic- Winner poster making and debate inter-college NCC camp
- Non-Academic- Winner Inter-College Basket Ball Championship
- Non Academic- Winner Poster making competition Tech Mahindra
- Winner of national level design competition for pitching a design idea (making board game accessible for visually impaired) conducted by Indian Polyurethane Association

Training and Projects

Major Project (M.Tech JNU)

Performance Evaluation of different Routing Protocols in Wireless Sensor Network under the Influence of Fault Nodes

Role in Project

- Performance evaluation like end to end delay, throughput, number of times link broke, hop count etc of AODV, Bellmanford, DSR, RIP and IARP routing protocols in WSN was done under influence of fault nodes.
- Performance evaluation of AODV routing protocol under influence of fault nodes with different time interval.
- Worked on QUALNET and MATLAB simulators for analysis of Wireless Sensor Network.

Major Project (B.Tech MDU) (Tech Mahindra)

Smart Retail Vending Machine

Role in Project

- Automate the data entry process and also effectively manage the time/work relation of every User.

- True data collection and solving most of the requirements of client-side user so as to implement it in anyweb environment.
- Remote monitoring of vending machines spread across various regions and automatic alerts by vending machine in case of any fault or low inventory stock via SMS or email using Google Webtool Kit (GWT)
- Display of all machines on google map.

Personal details

- Fathers Name – Joginder Rathee
- Date of birth – 12 March 1992
- Gender – Female
- Contact no. – 9717655652
- Email id – jyotsnarathe@gmail.com
- Nationality – Indian
- Hobbies – Reading tech books, Teaching underprivileged children, Adventure sports, Drama

References

1. Rizul Kumar, Research Associate, Industrial Research and Development IIT Delhi Contact no.: +91 8285577636, Email ID [:rizulthkr@gmail.com](mailto:rizulthkr@gmail.com)
2. Dr. Sushil Kumar, Assistant Professor, SC&SS, JNU.
3. Contact no.: 011- 26704771, Email ID: skdohare@mail.jnu.ac.in
4. Dr. Rahul Rishi, Director, UIET (MDU,Rohtak) , rahulrishi@rediffmail.com, 9812175085

Papers Published:-

- [1] Sri, Smriti, Chetna Dhand, Jyotsna Rathee, Seeram Ramakrishna, Pratima R. Solanki, Argha Sarkar, Santanu Maity et al. "SENSORLETTERS." *Sensor Letters* 17 (2019): 991-997.
- [2] Sri, Smriti, Chetna Dhand, Jyotsna Rathee, Seeram Ramakrishna, and Pratima R. Solanki. "Microfluidic based biosensors as point of care devices for infectious diseases management." *Sensor Letters* 17, no. 1 (2019): 4-16.
- [3] Rathee, Garima, Gaurav Bartwal, Jyotsna Rathee, Yogendra Kumar Mishra, Ajeet Kaushik, and Pratima R. Solanki. "Emerging Multi-Model Zirconia Nanosystems for High-Performance Biomedical Applications." *Advanced NanoBiomed Research* (2021): 2100039.
- [4] Sri, Smriti, Chetna Dhand, Jyotsna Rathee, Seeram Ramakrishna, Pratima R. Solanki, Argha Sarkar, Santanu Maity, Pinaki Chakraborty, and Swarnendu Kumar Chakraborty. "A Special Issue on Microfluidic, Nanostructures and Biomedical Sensors." (2019).