**Letter of Recommendation**

**Respected Authority,**

**I, Dr. Mainak Mukhopadhyay, Head of Department of Electronics and Communication Engineering, Birla Institute of Technology, Mesra, am pleased to recommend the candidature of Ms. Aruna Singh, who is seeking admit to Master’s program at your esteemed university. I have known Aruna in my capacity as her Professor for over two years during which, I had an opportunity to witness her academic and managerial capability. As a teacher, I have handled the subjects of Digital Electronics, Microprocessor and Microcontroller, and the respective laboratory coursework. This association has assured me that she has all the qualities to exceed expectations at your University.**

**Aruna’s knowledge and passion made her one of the brightest students in the batch. Her keen intent to understand engineering concepts makes her knowledge expand beyond the theoretical applications and indicates her potential for success in this field. As a part of final year project, Aruna and her team chose the significantly complex Congestion Avoidance Energy-Efficient Media Access Control Protocol for Wireless Sensor Networks during which, she had showcased the depth of knowledge of MATLAB and proficiency in microelectronic fabrication and wireless communication technologies by employing anycasting concept effectively. Her team designed CA-MAC protocol by using a traffic shaping approach which is an efficient technique to calculate the energy consumption thereby implemented this protocol using NS2 simulator to measure and improve its network performance. I would say that Aruna lived up to my expectations and contributed remarkably to the project. Her team spirit and cordial relations with her team members are highly commendable**

**Apart from her impressive work in her project, I was particularly appreciative of her approach towards her assignments, which was sincere and punctual. Her agility coupled with her relentless zeal gives her an edge over her peers which can be seen in her grades. Aruna had worked on Implementation of Read Only Memory where she inculcated the knowledge of VHDL and Embedded Systems for designing different ROM models to implement transport core economically on FPGA space. Her coding skills in embedded C and C++ were evidenced during her participation in the Robotics- Line Follower Robot Competition and secured the zonal level prize at IIT Delhi.**

**Ms. Aruna demonstrated true leadership qualities during these team projects by taking ownership and selflessly working for the team’s success within a stipulated time. She led the team to the semi-finals of a national level competition titled Ideas to Implementation conducted by IIM Calcutta where she presented the idea of Taxi Femme which dealt with cab services exclusively for women. Furthermore, she has shown solidarity by tutoring her juniors in subjects she is good at. In addition to her busy academic and professional pursuits, she has portrayed a keen enthusiasm for participating in cultural events like Best of Waste & Fashionista and technical events like Virtual Placement, Algo Crack & Technical Debate. Aruna, being the President of the Creative Arts Club in the Annual Techno-Cultural Fest, has organized and facilitated Fashionista event to its minutest details from deciding the theme to bringing sponsors on board.**

**Over my years of teaching and mentoring her, I have witnessed her transformation from an introverted person to an outspoken, and talented individual. Her pleasant demeanor and excellent communication skills make her a perfect fit for the program offered at your venerated department and university. I, therefore wholeheartedly recommend her and wish her the best in all her future endeavors.**

**Thanking you,**

**Dr. Mainak Mukhopadhyay**

**Head of Department**

**Department of Electronics and Communication Engineering**

**Birla Institute of Technology, Mesra**

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