

Name: AHMAD HOUKAN

Pref. Electrical Engineering
(Industrial Automation)

Statement of purpose for PhD admission

I am a senior postgraduate student in the Department of Electrical Engineering at **Siksha 'O' Anusandhan, Bhubaneswar, Odisha, India**. I am seeking admission to PhD program in Electronics and Communications Engineering at the **Indian Institute of Technology, Kharagpur** with **Industrial Automation** as my specialization. Through this statement of purpose, I intend to put forth my personal and educational background, research interests, goals and reasons for choosing your esteemed Institute.

I did my undergraduate studies in Electrical Drive Engineering at **Aleppo University, Syria**. During my undergraduate studies for five years (2012-2017) the excellent course structure coupled with high academic standards further simulated my interest in the field of Industrial networks in automated technological processes. A clear manifestation of my genuine interest is my continuously increasing GPA and my consistent good performance in the courses related to Industrial applications of computer networks, Automation of industrial technologic operation and communication Engineering. I have a **CGPA of 85.58% on a scale of 100**. My graduate project was about Driving a three-phase induction motor using V/F, **under the guidance of Prof. Ammar Naassani**. In this project, I studied V/F drive algorithms, analysis of their performance and their applications on induction motor, then studied the response of motor to these algorithms using MATLAB/SIMULINK, eventually designed work platform of industrial inverter to drive induction motor. I am doing M.Tech now in Electrical department (Power System and Power Electronics) at **SOA University**.

For further development of my keen interest and deeper understanding of the field **Industrial Automation (DCS & SCADA)**

I am working in My thesis to design a **SCADA System** using Arduino and It will be linked it to Bluetooth module by a serial port of Arduino so we get the internet of things where I will send receive, and view Data through an App which will be controlled by cellphone or a PC, **under the guidance of Prof. Debashis Sitikantha**. As part of my future PhD work at the **Indian Institute of Technology Kharagpur**, I am planning to work on finding the best Protocols that we have to use in the Industrial Automation, (DCS) develop it and apply it.

I plan to work within this field and develop my skills, and in agreement with the supervisor, we can together define the work plan more accurately.

I chose **Indian Institute of Technology, Kharagpur** to complete my PhD research because this institute is recognized worldwide as a leader in the field of engineering education and research. In addition, the institute has an outstanding faculty, many of whom are reputed for their research contributions internationally. More specifically, The Electrical Engineering Department is at the forefront of the academics and it has a very vibrant postgraduate program with a strong focus on research and development. Finally, there are many of my friends who are in your university and have praised the university to me, their satisfaction about it, and your cooperation with them.