Increase Productivity In the Industry Using Wearable Devices and Artificial Intelligence

Shafkat Waheed
School of Electrical and Computer Engineering
North South University
Email: shafkat.waheed@gmail.com

Muhammad Raihan
School of Electrical and Computer Engineering
North South University
Email: Muhammad.Raihan@northsouth.edu

Mohammad Ashrafuzzaman Khan
School of Electrical and Computer Engineering
Telephone: (800) 555–1212
Fax: (888) 555–1212

***Abstract*—This paper proposes an general approach to increase the productivity in day to day work flow of the people who are engaged in monotonous task in the industry.This papers explores various deep learning techniques like convolutional neural network and Wavelet Analysis to extract information from wearable devices such as eSensor, Camera and give meaningful feedback using Recurrent Neural Network to maximize worker productivity through out the day.Some feed backs like worker schedule,stress level and the method of working is suggested that increases the total work flow in the industry.**

1. Introduction

Since the invention of wearable devices technology is progressing towards an IOT based solution in various sectors of our day to day life [?].The the future is IOT devices and providing smart solution through it.In our surrounding IOT devices are being applied in home monitoring, health monitoring and improving human experiences through a vary broad spectrum of small IOT devices[?].As human being are only able to make decision and optimize day to day activities using the six sense they posses[?].IOT devices increased the previous dimension human possessed.It worked as a catalyst to provide more information than what one can collect using their biological senses and those information with the help of machine learning and A.I enabled drastic optimization on every sector that feeds on data, wearable devices like fit-bit, smart watch are changing the whole scenario of data harvesting and decision making [?]. The world is changing, due to small optimization provided by IOT devices and A.I.

Manufacturing industry is no stranger to such change.Germany is the first to understand the potential of manufacturing using IOT devices and Artificial Intelligence[?].They were able to change the whole scene of manufacturing with the integration of small devices in everyday production.Sensors like accelerometer,gyroscope,heat detector,light detector and vibration detector increased the dimension of standard information one could garner or gather[?]. Information of such volume crafted the way for machine learning and A.I to effectively optimize the work flow, industrial production and efficiency.

In this paper we tried to use such data collected from wearable device like eSensor and camera to understand the work flow of the environment, while improving its efficiency by smart scheduling,worker placement and stress detection using Artificial Intelligence.

shafkat waheed
July 7 , 2019

1.1. Subsection Heading Here

Subsection text here.

1.1.1. Subsubsection Heading Here. Subsubsection text here.

2. Conclusion

The conclusion goes here.

Acknowledgments

The authors would like to thank...

References

[1] H. Kopka and P. W. Daly, *A Guide to LaTeX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.