

# Nowrin Akter Surovi

Curriculum Vitae

## PERSONAL DETAILS

*Birth* November 11, 1992  
*Address* Blk: 419, Tampines Street, 520419  
*Phone* +6591403291  
*E-mail* nowrin0102@gmail.com

## EDUCATION

### PhD in Engineering Product Development

September  
2018-present

*Singapore University of technology and Design*

**Result:** 4.3 out of 5.00

### M.Sc. in Electrical and Electronic Engineering

2015-2016

*University of Dhaka*

**Result:** 3.74 out of 4.00

### B.Sc. in Applied physics, Electronics and Communication engineering

2010-2014

*University of Dhaka*

**Result:** 3.76 out of 4.00 (5<sup>th</sup> among 80 students).

## WORK EXPERIENCE

### Research Assistant

2016-2018

*Bangladesh Council of Scientific and Industrial Research*

It is a well-known research organization in Bangladesh funded by the government of Bangladesh. My work was focused on image processing of diseased skin. I was also associate with different research and development projects named “Design and development of a digital temperature controller and digital water bath”, “Design and development of micro-controller based automatic voltage stabilizer” and “Development of smart control and monitoring system for Electrical and Electronics equipment using Internet Of Things (IOT)”.

### Intern

May, 2019- August, 2019

*Singapore Institute of Manufacturing Technology (A\*STAR, SIMTech)*

## RESEARCH INTERESTS

- Machine and Deep Learning
- Signal and Image Processing
- Additive Manufacturing
- computer Vision

## PROJECTS

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- **Project In SIMtech.** Intelligent Robotic Manipulation System with Deep Learning: Semantic Segmentation on ADE20K dataset using FCN+Mobilenetv2 and FCN+ShuffleNetv2 network.
- **Website Development.** Django poll application where users can create questions and vote them. Github link: [https://github.com/nowrin0102/web\\_dev](https://github.com/nowrin0102/web_dev)
- **Phd Topic** Geometric defects identification during metal additive manufacturing process.
- **M.Sc Project** Development an algorithm for analysing different skin diseases using image processing method.

## PAPERS PUBLISHED

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### Journals:

- Abu Kowsar, Abdullah Yousuf Imam, Mashudur Rahaman, Muhammad Shahriar Bashar, Md. Saidul Islam, Sumona Islam, **Nowrin Akter Surovi** and Zahid Hasan Mahmood, (2014), Comparative study on the efficiencies of silicon solar cell, *International Organization of Scientific Research (IOSR) Journal of Applied Physics (IOSR - JAP)*, 6(6).

### Conference:

- **Nowrin Akter Surovi**, Shaista Hussain, Gim Song Soh. A Study of Machine Learning Framework For Enabling Early Defect Detection In Wire Arc Additive Manufacturing Processes *Proceedings of the ASME 2022 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. 48th Design Automation Conference (DAC). St. Louis, Missouri. August 14–17, 2022.*
- **Nowrin Akter Surovi**, Gim Song Soh. Process Map Generation of Geometrically Uniform Beads Using Support Vector Machine. *International Conference of Additive Manufacturing for a Better World. Materials Today Proceeding. Elsevier-2022.*
- **Nowrin Akter Surovi**, Audelia G. Dharmawan, Gim Song Soh(2021), A Study on the Acoustic Signal Based Frameworks for the Real-Time Identification of Geometrically Defective Wire Arc Bead, *Proceedings of the ASME 2021 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. Volume 3A: 47th Design Automation Conference (DAC). Virtual, Online. August 17–19, 2021.*
- **Nowrin Akter Surovi**, Abul Kashem, Khaledun nahar babi, (2017), An Algorithm for Analyzing Skin Diseases Using Image Segmentation and Image Histogram for Mobile Tele-Dermatology, *National Conference of Bangladesh Physical Society.*
- **Nowrin Akter Surovi**, Abul Kashem, Khaledun nahar babi, (2018), Development of an algorithm for Analyzing Different Skin Diseases Using Digital Image Processing Technique, *International Conference of Bangladesh Physical Society. .*

## **SKILLS**

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- **Languages:** Python, MATLAB, C, Assembly
- Familiar with HTML, JAVA, JavaScript.
- **Software:** SOLIDWORKS, AutoCAD, Packet Tracer
- Excellent presentation skill and proficiency in technical writing (Latex).
- Ability to work independently as well as in a team.

## **AWARDS AND SCHOLARSHIPS**

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- SUTD PhD Fellowship
- National Science and Technology (NST) scholarship by the Ministry of Science and Technology, Bangladesh, 2016
- Dhaka University Merit Scholarship, Bangladesh, 2014.
- Dhaka University Alumni Association Scholarship, Bangladesh, 2011.