Non-intrusive Testing of Liquid Culture Medium using Online NIR Spectroscopy and Machine Learning for Qualitative Analysis

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Abstract

This capstone report.

Keywords: Bioprocess Monitoring, Machine Learning, Near-Infared Spectroscopy (NIR), 1D Convolutional Neural Network (1D-CNN), Qualitative Analysis

1. Introduction

Introduction

2. Materials and Methods

2.1. Materials

Materials

2.2. Methods

Methods

3. Results

Results

3.1. Data Analysis

Analysis

4. Discussion

Discussion

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[1]Conceptualization

[2]Validation & Software

[3]Investigation & Methodology

[4]Principle Investigator & Capstone Supervisor

5. Conclusion

Conclusion

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