

## **ABSTRACT**

*Study Independent Program at PT Orbit Future Academy with the Foundation of AI and Life skills for Gen-Z learning program, which is an online Artificial Intelligence training program for students to know the basics in Artificial Intelligence, know the basics of the python program, and build relationships between campuses. This program was carried out for five months with material presentations by AI domain coaches and life skills coaches and continued with the final proyek work. The final proyek that was appointed was regarding the Facial Recognition Sistem for Bangka Belitung State Manufacturing Polytechnic students using the Convolutional Neural Network (CNN). This sistem applies the Deep learning model in Computer vision (CV) with the Convolutional Neural Network algorithm approach. This sistem aims to help detect faces of Bangka Belitung State Manufacturing Polytechnic students so that they are easily recognized. Based on the results of trials that have been carried out in the proyek, it produces output that can detect faces and recognize identities according to the input data.*

**Keywords:** *Artificial Intelligence, Deep learning, Computer vision, Convolutional Neural Network, Face Detection*