# AUTOCRADLE: AUTOMATIC BABY CRADLE ROBOT SIMULATION USING V-REP

College of Engineering, Architecture and Industrial Design

# BOHOL ISLAND STATE UNIVERSITY

Main Campus, Tagbilaran City, Bohol

Crisha Mae M. Acasio Kenneth Harold D. Panis Loyd Vincent Butron Lyca A. Lague

# AUTOCRADLE: AUTOMATIC BABY CRADLE ROBOT SIMULATION USING V-REP

Research Project Presentation for Bachelor of Science in Computer Engineering

# BOHOL ISLAND STATE UNIVERSITY

Main Campus, Tagbilaran City, Bohol

In Partial Fulfillment of the Requirements of the Course

# CPE 318 - INTRODUCTION TO ROBOTICS

Crisha Mae M. Acasio Kenneth Harold D. Panis Loyd Vincent Butron Lyca A. Lague

November 2022

# IMAGINATIVE ABSTRACT

Parenthood is a time of joy for most parents but while it can be gratifying, there are countless struggles and obstacles along the way. A common struggle among new parents is dealing with their babies' unpredictable sleep schedules. Newborns often wake up and cry at night, especially when they are not hungry or tired. However, this can lead to exhaustion for the parents who must get up and soothe their babies no matter how tired they are. Over time, this cycle of exhaustion make parenthood even more difficult. We propose a concept, dubbed "Autocradle," to help solve or at least ease these burdens. We envisioned a device that would automate the swinging motion of a cradle by detecting excessive movement or crying using a microphone and a motion sensor. Aside from that, we have plans to add other features down the line and if time allows such as: a feature that automatically turns on the lullaby tune, a water sensor was placed at the bedding of the baby so that if the bed parents can be notified and, humidity sensors that can turns on a fan automatically to cool down the baby.