**A Finite Element Study of Pile-up and Sink-in Phenonemon on Bulk and Thin Film Materials**

**A Thesis Submitted to the Graduate School of the Tatung University in Partial Fulfillment of the Requirements for the Degree of Master of Science**

**By**

# **Tsung-Min Liu**

**Approved by Thesis Oral Committee:**

**January/ July 〇〇, 2022**

**Advisor Date of Examination**

 **Chairman of Graduate School**