

DEEP LEARNING APPLIED TO PUBLIC COMPANY VALUATION FOR VALUE
INVESTING

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DEEP LEARNING APPLIED TO PUBLIC COMPANY VALUATION
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The Supervisory Committee certifies that this *disquisition* complies with North Dakota
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ABSTRACT

Value investing is an investing approach that seeks to discover and take advantage of price discrepancies between the market price and the actual value of a company (intrinsic value). The purpose of this work is to measure the intrinsic value of companies using an approach that has had success in the broad field of Artificial Intelligence, Deep Learning. Finding patterns in large amounts of data is what Deep Learning can be used for. Typically for value investing an investor will seek to find conservative estimates on the current value of a company by analyzing fundamental data. Our method attempts to perform these estimates in a data driven manor using Deep Learning to estimate the intrinsic value of a company with the overall goal of aiding the Investor in uncovering undervalued companies.

DEDICATION

To my wife who has helped me endlessly during my master's program and is there for me in every step of my life.

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LIST OF ABBREVIATIONS

ANN	Artificial Neural Network
AI	Artificial Intelligence
CNN	Convolutional Neural Network
DCF	Discount Cash Flow
EPS	Earnings Per Share
FFN	Feed Forward Neural Network
MSE	Mean Squared Error
PE Ratio	Price to earnings ratio
RNN	Recurrent Neural Network
S&P	Standard and Poor Index