

THOMAS DEVINE

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EDUCATION

CARNEGIE MELLON UNIVERSITY MS IN ECONOMICS; Awards: \$138,000, National Science Foundation Graduate Research Fellowship in Economics	2018–2021
UNIVERSITY OF NORTH DAKOTA B.S. MATHEMATICS, MINOR IN STATISTICS; BA ECONOMICS; GPA 3.78 Awards: McNair Scholar; speaker at UND's Phi Beta Kappa induction ceremony	2015–2018

WORK AND RESEARCH EXPERIENCE

Carnegie Mellon University <i>Master's Thesis</i>	Summer 2020 <i>Pittsburgh, PA</i>
· Using R & Stata, I used causal inference via a first differences approach to the adoption of Solar Panel (PV) installations of a neighbor's decision to install PV affects peers at the zip code-level using public Census & ACS data; this entailed webscraping, data cleaning, modeling, statistical inference, and more.	
Carnegie Mellon University <i>Teaching Assistant</i>	Jan. 2020–Present <i>Pittsburgh, PA</i>
· (Graduate) Statistical Foundations for Business Analytics (46-883), 2 courses; Forecasting Time Series Data (45-912), 1 course. (Undergrad.) Political Economy (73-332), 2 courses; Overall, I answered questions in R and explained class concepts in statistics, econometrics, and economics	
Topic Modeling with Machine Learning (project in progress)	Feb. 2021–Present
· Using R (tm, openNLP), I parse comedy monologues (stand-up specials) to build a recommendation application. I use LDA, LSA, and NMF to assess topics. I map/cluster specials, topics, and comedians to defined genres of comedy and to one another. I make a functional API to showcase the project.	
CNA Financial <i>Actuarial Intern - Long Term Care</i>	June–August 2018 <i>Chicago, IL</i>
· Using R, SAS, and Alteryx, I converted (SAS to Alteryx) a monthly 4-step process in that aggregates counts for incurred but not reported claims and terminated but not reported claims for the group and individual policies; I converted (SAS to R) a monthly close process that aggregates claim counts	
Carnegie Mellon University <i>Undergraduate Researcher in Financial Math</i>	May–July 2017 <i>Pittsburgh, PA</i>
· Using R and Python, my team web-scraped put option prices into a gradient descent algorithm for chosen stocks on the DJIA and compared the efficiency of random sets of stocks to calculate error (SSE)	

TECHNICAL AND ANALYTICAL SKILL SET

Skills R, Java, Python, Matlab, SQL, L^AT_EX, Stata, SAS, Alteryx, Spanish (Intermediate)
IDEs: RStudio, Spyder, DBeaver, IntelliJ, Jupyter Notebook; Actuarial Exam P (01/2017)

LEADERSHIP ROLES

· CMU Club: Actuarial Science	President	2018–2021
· UND Clubs: Chess, Actuarial Science, Political (VP)	Presidentx2, VPx1	2016–2018