SEBASTIAN PRETZER

Education

MS Northwestern University
Computer Science
Expected June 2019

BA Northwestern University
Computer Science
Expected June 2018

Coursework

Statistical Language Modeling
Natural Language Processing
Deep Learning Foundations
Artificial Intelligence Programming
Intelligent Information Systems
Machine Learning
Internet of Things
Human Computer Interaction

Multivariable Calculus
Linear Algebra
Combinatorics and Discrete Maths
Graph Theory
Intro to Optimization

Skills

Python, TensorFlow, Swift, HTML,
CSS, JS, C++, Java, LaTex, Excel

Contact

202-812-9657
pretzer@u.northwestern.edu

675 E St NW Apt 310
Washington, DC 20004

Experience

WebSAIL
Research Assistant, January 2018 - Present
- Investigated the effectiveness of word embeddings in generative models of dictionaries
- Improved on Definition Modeling[1] to include parts-of-speech

Backlight Resumes
Researcher, June 2017 - Present
- Developed a deep learning model to autonomously optimize a client's resume
- Modified Google's Neural Machine Translation System[2] for translation of unedited resumes to edited ones

NU Electrical Engineering and Computer Science
Peer Mentor, March 2017 - June 2017
- Assisted CS professors in teaching and grading courses
- Held office hours and discussion to guide students

Projects

Crowd Density Monitoring
- Led team to build a doorway sensor to monitor people entering and exiting a space, such as a cafeteria, library, etc.
- Applied machine learning techniques to data to try to detect patterns in movement in and out of rooms

Impact of Modern NBA Positions
- Manipulated player statistics to cluster NBA positions that do not coincide with the traditional 5 positions[3]
- Found insights into combinations of positions and their impact on plus/minus scoring

Finding Undervalued Stocks
- Used machine learning techniques to identify undervalued companies
- Expanded knowledge of different machine learning algorithms and of stock market

Activities

NU Investment Management Group
Researcher, October 2015 - Present
- Supplied analysts with data analysis to back up pitches
- Used Python and R to run algorithms and regressions on large datasets

[1] arXiv:1612:00394
[2] arXiv:1609:08144
[3] goo.gl/wHdWUr