

# DAVID A. BERMAN

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## EDUCATION

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Bachelor of Arts: Economics

University of Chicago

 Sept 2015 – Jun 2019     Chicago, Illinois

- NCAA Student Athlete: Swimming
- Booth School of Business courses: Financial Accounting, Corporate Finance, and Financial Statement Analysis

High School Diploma

New Trier High School



 Aug 2011 – Jun 2015     Winnetka, Illinois

## WORK EXPERIENCE

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Capacity Development and Innovation Branch Intern

United Nations Environment Programme (UNEP)



 Aug 2019 – Apr 2020     Nairobi, Kenya

- Maintained database of and built macro-economic and operating financial models for wastewater recovery projects
- Conducted environmental, social, and economic research to produce presentations and publications including the Emissions Gap Report 2019
- Collaborated with UN Member States in drafting evidence based legislature to promote private sector Green and Blue investment
- Coordinated with UN Agencies (UNDP, UNHCR, and WFP) to incorporate environmental indicators into existing models for development

Business Analyst Intern

BuiltWorlds

Market research firm working to understand and expand upon recent innovations in the built environment


 June 2018 – Aug 2018     Chicago, Illinois

- Performed in depth market research on potential new market entrances to optimize growth, diversification, and potential risks
- Tracked customer engagement across various products through the development and review of key performance indicators
- Optimized the use of the company's CRM by incorporating clustering techniques to funnel leads appropriately

Acquisitions Intern

Klaff Realty

Real estate private equity firm with assets across The Americas

 June 2017 – Aug 2017     Chicago, Illinois

- Reviewed offering memoranda and determined their viability
- Compared property debt alternatives to find optimal duration, leverage, interest rate, capital structure, and covenants
- Performed in depth market research on global real estate markets
- Analyzed macro-economic and development trends to find international investment opportunities (particularly in Latin America)

## PROJECTS

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Two Sigma Market Prediction

Competition: Top 10% Finisher

- Organized and analyzed two Pandas Data Frames: 10 years of daily return for 3,780 unique equities and 9.32 million published articles
- Used clustering within scikit-learn to structure the data then applied a Probabilistic Neural Network within TensorFlow Probability to predict movements while incorporating concepts of risk and uncertainty

Textual Analysis and Semantic Search of ESG Reporting

- Applied Natural Language Processing (NLP) techniques, including Word2Vec and BERT, to find passages within text relevant to specific Sustainable Development Goals (SDGs)
- Identified coverage of SDGs aggregated by industry, geography, and time, to better understand which approaches work and which need improvement

Analysis of the placement and result of energy infrastructure

- Analyzed U.S. and international data sets to find what factors determined locations of different forms of energy infrastructure (Coal, Natural Gas, Nuclear, and Renewable)
- Once placed, used techniques such as spatial auto-correlation to measure how these structures impacted surrounding communities and how the cost/benefit was dissipated over time and location

## SKILLS

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Fluent Russian, Basic Spanish  
Basic French (Spring 2018 study abroad at Paris Diderot University)

**Analysis:** Excel (W/VBA), Linux, Matlab, Python, R, Stata, SQL

**Presentation:** Adobe Creative Suite, Fusion 360,  $\LaTeX$ , Microsoft Office Suite