

(609) 751-1349 jddrossman@gmail.com 12 Summer Street, Boston, MA 02129

# **PROFESSIONAL SUMMARY**

I am a driven professional seeking an opportunity to apply a strong theoretic foundation in operations research to solve challenging and interesting problems within the energy space. Excellent at communication and presentation, I enjoy working in a team setting but am also comfortable working through problems independently. Keen attention to detail and committed to going above and beyond what is expected.

### **KNOWLEDGE & SKILLS**

- Operations Research Theory & Application (Statistics, Simulation, Optimization)
- Energy & Power Market Structure & Economics
- **Programming Fluency** (Java, Python)
- Data Cleaning, Mining, Analysis & Visualization (R, MS Excel, Tableau)
- Financial Engineering
- Presentation/Knowledge Sharing across experience levels and backgrounds

### **EXPERIENCE**

# Supply Chain Analyst, Wood Mackenzie, Aug 2022 - Present, Boston, MA

- Leverage Supply Chain Analytics solutions to improve utility, O&G, and natural resources firms' supply chain procurement processes, resulting in identification of multi-million-dollar savings opportunities
- Design and develop python-based in-house tools to aggregate, clean, and mine dirty client transactional data
- Statistical analysis (regressions, time series) on mined data to generate price benchmark distributions, parameterized cost models, and price forecasts
- Identify improvements to Supply Chain Analytics platform to enhance value and client interpretability
- Responsible for communication and delivery of analysis to clients, including ongoing support to facilitate implementation of analytical results

# Research Assistant, Andlinger Center for Energy and the Environment, May 2021 - Aug 2021, Princeton, NJ

- Performed extensive research on network optimization software for carbon capture and storage (CCS) pipeline infrastructure to be deployed in a regional case study, communicating findings to head research engineer
- Adapted existing CCS network optimization model objective and constraints in Java to meet project goals
- Gathered test data from publicly available sources and wrote scripts in Python and R to format input for optimization models

# Research Assistant, Energy Systems Analysis Group, May 2020 - May 2021, Princeton, NJ

- Worked with complex optimization software to produce 30-year models of US energy system decarbonization pathways with hundreds of variables ranging from technology curves to macroeconomic considerations
- Performed sensitivity analysis by varying model parameters (available technologies, costs, buildout rates, etc.) to determine parameter influence and projected decarbonization impacts on US energy system
- Utilized Tableau, R and MS Excel to prepare visualizations to display model decision variables and projections

### **EDUCATION**

Bachelor of Science in Engineering, Operations Research and Financial Engineering **Princeton University** – Princeton, NJ

May 2022

- GPA: 3.92
- Magna Cum Laude
- Honors: Phi Beta Kappa, Tau Beta Pi, Sigma Xi

# **PUBLICATIONS**

Report: Larson et al. Net-Zero America: Potential Pathways, Infrastructure, and Impacts. 2020.