

## **Ariella Fuzaylov, Associate**

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### **PROFESSIONAL EXPERIENCE**

**Synapse Energy Economics**, Cambridge, MA. *Associate*, January 2024 – Present.

- Consults on energy-sector issues such as renewable resource penetration, energy efficiency, and building decarbonization with a focus on quantitative modeling methods.
- Monitors capacity auction reform, load forecasting, day-ahead and real-time energy market issues in ongoing representation of consumer advocates and energy efficiency clients within the New England Power Pool (NEPOOL), as well as projects in other wholesale markets.
- Supports the development of comments, testimony, and reports related to renewable energy portfolios, renewable resource penetration, and industrial building decarbonization.
- Maintains online dashboards, in-house modeling tools, and databases.

**Synapse Energy Economics and Climable**, Cambridge, MA. *Energy Workforce Diversification Intern*, September 2023 – December 2023.

- Wrote report about decarbonization strategies for difficult to decarbonize commercial buildings in Boston according to BERDO regulations.
- Analyzed building use specific hurdles to decarbonization and conducted research on solutions tailored to Boston building stock and climate.

**SSENSE**, Montreal, QC. *Data Engineer*, May 2021 – November 2022.

- Managed a smooth data transition during a website framework migration and achieved zero database downtime by investigating downstream effects of the transition and coordinating the necessary code updates with all involved teams.
- Built, developed, and maintained ETL (Extract, Transform, Load) processes to extract data from various sources, transformed data into a standardized format, and loaded it into the self-service data lake.
- Created and maintained databases for a variety of business, payroll, and internal purposes from clickstream and batch data.

**Prometheus Lab at McGill University**, Montreal, QC. *Research Assistant*, January 2021- May 2021.

- Researched and developed a modern recipe sharing web application with a focus on how food creates community resulting in a prototype and a supporting report.
- Collected and analyzed user survey data using statistical and qualitative techniques including dimensionality reduction.

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- Compiled results from data analysis and existing product research to inform my proposed design changes.

**JetBrains Inc.**, Boston, MA. *Software Engineer Intern*, September 2020 – December 2020.

- Researched and developed an improved code auto-completion algorithm that more efficiently searches through possible alpha-numeric strings using finite-state machine concepts.

**Energy Federation Inc.**, Westborough, MA. *Software Engineering Intern*, June 2019 – August 2019.

- Shortened consultant on-boarding time by four weeks by creating a data dictionary for the production database and supporting documentation.
- Fixed discrepancies between six figure client invoices and internal reports by analyzing and modifying MySQL queries to reflect differences in reported data.

**Spruhan Engineering P.C. and Peter Nolan & Associates LLC**, Newton, MA. *Surveying Assistant*, June 2018 – August 2018

- Created CAD models of properties by collecting and synthesizing geographic survey data.
- Determined if new construction conformed to city land usage and zoning laws based on my survey and CAD model.

## EDUCATION

**McGill University**, Montreal, QC

Bachelor of Science in Computer Science and Statistics, 2023

## SKILLS

EnCompass, ESIST, Python, R, Excel, SQL, Airflow, AWS, Azure, ETL Orchestration

## PUBLICATIONS

Havumaki, B., A. Fuzaylov, M. Whited. 2025. *Optimizing Incentives for Effective PIMs: Coordinating PIMs with authorized ROE for Efficient and Effective Regulation*. Synapse Energy Economics for Clean Virginia.

Shenstone-Harris, S., M. Whited, K. Takahashi, S. Schadler, A. Fuzaylov, I. Weiss. 2025. *How Will Future Electric Vehicle Adoption and Building Electrification Affect Electric Rates?* New Jersey Factsheet. Synapse Energy Economics for Natural Resources Defense Council.

Shenstone-Harris, S., M. Whited, K. Takahashi, S. Schadler, A. Fuzaylov, I. Weiss. 2025. *How Will Future Electric Vehicle Adoption and Building Electrification Affect Electric Rates?* New Mexico Factsheet. Synapse Energy Economics for Natural Resources Defense Council.

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