Veena Shirsath

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EDUCATION

MS in Economics and Computation, Duke University **May 2026**
- CGPA: 3.75/4.0 *Durham, USA*
- Relevant courses: Asset Pricing and Risk Management, Predictive Modelling, Machine Learning, Deep Learning, Theory and Algorithms of Machine Learning, Econometrics, Advanced Microeconomic Analysis, ESG Investing

BA (Hons) Economics, Ahmedabad University **May 2024**
- CGPA: 3.78/4 *Ahmedabad, India*
- Relevant courses: Energy and Climate Change, Environmental and Resource Economics, Data Science, Time Series Econometrics, Mathematical Statistics, Intermediate Microeconomics, Cities and Transport

SKILLS & CERTIFICATIONS

- **Programming & software:** Python (Torch, Tensorflow, Scikitlearn, statsmodels, PyPSA), R, STATA, QGIS, LaTeX, Tableau, BigQuery
- **Skills:** data visualization, data analytics, data cleaning, machine learning, time series analysis, geospatial analysis, image classification, object detection, energy modelling, load forecasting, financial modelling

WORK & RESEARCH EXPERIENCE

Energy-sector Practicum: Role of Utilities in Climate Change **Jan -May 2026**
- Work on client projects with water and energy utilities in the US to assess their role in climate action and their risks under climate change

Data Lab Intern, Duke University Libraries **Aug 2025 – present**
- Provided data consulting for undergraduate, graduate, and PhD researchers within Duke University
- Scope of work included data sources, coding, spatial visualization, software use assistance

Research project: *Energy Transition During Energy Crisis: Cape Town's Experience* **Jan – Aug 2025**
- Project under Prof. Marc Jeuland, Sandford School of Public Policy, Duke University
- Using electricity utility billing data along with climate, land parcel, and solar panel adoption data to understand the relation between PV system adoption, load shedding and electricity consumption
- Responsibilities include econometric modelling in STATA, data analysis/visualization and mapping in Python

Data Science Intern, Nimble Energy, USA **May – July 2025**
- Conducted data analysis for facility interval data, built custom models for outlier detection and identifying load characteristics like opening and closing hours
- Built a robust pipeline for automated data insights from interval data for clients.

Undergraduate thesis **Aug 2023 – May 2024**

Title: Estimating household cooling demand through smart meters for effective demand-side management of residential cooling
- Analyzed how utilities can use interval data for decision-making and policy like load prediction and DSM
- Developed machine learning models to conduct non-intrusive load monitoring and predict appliance-level use
- Presented research poster at the ECEEE 2024 Summer Study on energy efficiency and to other clean energy stakeholders

Summer Research Fellow, ps Collective, India **May 2023 – May 2024**
- Conducted data analysis, clustering and classification of residential energy load curves using Python
- Undertook extensive literature review of load curve research and application of smart meter data