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, PyPSA), R, STATA, QGIS, MS Excel, Tableau
- **Skills:** Data Analytics, Machine Learning, Deep Learning, Image classification, Econometrics, Time Series Econometrics, Causal Inference, Linear Programming, GIS, Energy Modelling, Database Management

WORK & RESEARCH EXPERIENCE

Tideland EMC utility: energy resiliency for coastal communities **Jan 2026 - present**
- Evaluating energy infrastructure vulnerability and financing mechanisms for resilience projects

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

Research project: *Energy Transition During Energy Crisis: Cape Town's Experience* **Jan 2025 – present**
- Project under Prof. Marc Jeuland, Sandford School of Public Policy, Duke University for the City of Cape Town electric utility
- 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

PROJECTS, COMPETITIONS & LEADERSHIP

Energy in Emerging Markets Case Competition (Won 2nd Place) **Sep - Nov 2024**
- Analyzed growth potential and strategies for an E-mobility company in Uganda