

Summary

Results-driven Ph.D. Economist and Solar Technologist, bringing 10+ years of experience developing, implementing, scaling and **managing solar inclusive projects and programs to empower frontline communities**. Expert in energy efficiency programs for low- and moderate-income communities, including equitable climate goals and decarbonization policies. Experience developing long term strategies and directing strategic programs related to building energy efficiency, **renewable clean energy and inclusive solar deployment**. Successfully led development and implementation of industry-defining SaaS platform, the **LIFT Toolkit** that empowers developers of community solar energy programs to deliver their own custom, personalized energy experiences, accelerating transformation of solar energy systems using different financing methodologies by **managing, planning and directing** work across multiple organizations and directly with the US Department of Energy (DOE). Led development of Groundswell's SharePower platform, created scalable approaches for sharing data and analytics, designing **user experience and customer success** journey across technology offices, based on deep engineering analytics background, critical thinking and predictive modeling experience. Led development of DOE Community Power Accelerator (formerly **Credit Ready Solar Initiative**) Course materials, and promoted evidence based decision making for the DOE **LIHEAP Customer Billing Subscription Platform** through collaboration with DOEE and analytical structures to support data-driven decision outcomes. Strong industry knowledge and experience designing and executing energy efficiency technologies, building systems, and leading cross-functional team.

Education and Training

Leadership Development Training, 04/2023
Korn Ferry - Washington DC

Ph.D.: Economics, 12/2015
University of Bath - Bath

Master of Science: Business Economics and Finance, 11/2010
London Metropolitan University - London

Accomplishments: Energy Transition & Climate Goals

- Successfully delivered LIFT Toolkit (**October 2022**) and authored DOE End of Project (EOP) LIFT Solar Everywhere Research Report in **April 2023**.
- Respected-leader in the industry, created partnerships with multiple organizations.
- Acted as Special Advisor and Subject Matter Expert for **DOE Renewables Advancing Community Energy Resilience (RACER)** Funding Program through Groundswell.
- Originated framework and pioneered data analytics for Groundswell's **SOUL program** in LaGrange GA, that led households to save on average **\$500** annually on their utility bills.
- Partnered with **NREL/Sharing the Sun** to maintain LIFT Toolkit, adding community-owned, and resilience (solar, storage and battery) projects.
- **Interfaced with multiple industry led solar organizations (NEAUC, ACEEE, ASES, RE+) and presented research findings to ACEEE, NEUAC, ASES, SURA, NCSP and other renowned institutions.**
- Authored numerous energy modeling data-driven publications on clean and renewable energy, and presented at conferences nationwide.
- Consulted with stakeholders and decision-makers on energy efficiency, **decarbonization** and democratization at **Southface Institute and Chisholm Legacy Project**.
- Developed technology models models, research designs, content writing, and **user acceptability testing** for software tools, including the LIFT Toolkit.
- Served as strategic advisor to executive team, and led multiple data governance initiatives for Solar Institutes such as **Stanford Impact Labs and Sustainable Advisors**.
- Influenced decision making of key actionable outcomes to propel development of solar services to marginalized communities using data to deliver insights - for the **SharePower Platform & DOEE Income Verification Research** through Groundswell.
- Built a multi-year strategy around data across different solar organizations to ensure appropriate collection, use and interpretation of data - including a framework for governance and R&D.
- Developed policy and operating documents to improve energy efficiency policies and programs across the country.

Skills

- **Energy Modeling & Clean Energy Technologies**
 - **Inclusive Utility Investments & Clean Energy Transition**
 - Grant Impact Evaluation & Financial Management
 - **Climate Finance & Decarbonization**
 - **SaaS, PaaS & Software Development**
 - Program Evaluation, Entrepreneurial & Creative Abilities
 - Equity, **Climate Change** & Social Justice
 - Racial Justice & Communities of Color
 - **Thought Leadership** & Executive Management
 - **Administration and People Management**
 - **Strategic Leadership & Intellectual Soundness**
 - Technical Writing, **Communication** & Organizational Skills
 - Strategy Consulting & Business Development
 - Coaching, Supervision & Presentation
 - Process Improvement, Quality Assurance & Control
- Project Management & Compliance Management
 - **Organizational Development & Industry Transformation**
 - Stakeholder Engagement & **Problem-Solving**
 - **Staff Development**, Training & Mentorship
 - Business Development & Project Performance
 - Capacity Building & Technical Assistance
 - Statistical Analysis & **Data Analytical Design**
 - **Data Visualization** & Dashboarding
 - Data Standardization and Aggregation
 - Quantitative Analytics & Research Reporting
 - **Data Science**, Method Development & Policy Analysis
 - Qualitative Research & Survey Analysis
 - **Statistical Modeling, MLE & Data Analysis**
 - **Python, R, SQL**, Microsoft Word & Microsoft Excel

Experience

VP of Labs and Data Science, 08/2020 to Current

Groundswell Inc – City, STATE

- Delivering high value toolkit to expand development of **community solar** projects, and **energy efficiency programs** for residential low-income households across the country.
- Developing and implementing methods of expanding and educating frontline communities on energy efficiency in LaGrange, GA.
- Developing effective analytical approaches/climate solutions for deploying solar to LMI communities, including systems and procedures for equitable clean energy access across states.
- Interpreting, advising and making recommendations on effects of policies such as **IRA and IIJA** and regulatory frameworks for enabling low-income solar and community solar access.
- Working closely with CEO/COO to define solar development opportunities for underserved communities, including market transformation, providing oversight and execution of state-wide solar implementation.
- **Coaching, supervising staff** and leading negotiations on sub-contract agreements and market opportunities.
- Developing and overseeing data analysis efforts to produce accurate, efficient, and timely data reporting models, including federal and state deliverables (**DOE End of Progress Technical Report for the LIFT Toolkit**), contract deliverables, ad hoc reports, and internal reports for all functional areas - such as **DOEE Income Verification Solar for All Program Research**.
- Evaluating program impacts, leading teams to resolve complex technology, data, and process based issues, gaps, and risks.
- Facilitating development, implementation, and **user acceptability testing (UAT)** for clean energy solar tools to adhere to standard operating protocols and outcomes.
- Leading executive cross-functional steering committees (such as Research Advisory Council) related to analytics tools with various functional areas to meet climate change and **decarbonization goals for energy democratization in GA and NC**.
- Progressing solar energy transition by developing **SaaS products**, research agenda and driving data decisions for the organization.
- Aligning research with customer needs and identifying emerging themes that will impact customer acquisition for the **SharePower Subscriber Management and Customer Billing** platform.
- Leading strategic data analytical projects and providing thought leadership and expertise on data governance issues for **Stanford Impact Labs**.
- Changing future for renewable energy by reformulating models and producing ground breaking research on energy burden, energy equity, energy justice and climate change.
- Identifying future growth opportunities and contributing to National Community Solar Partnership (**NCSP**) LIHEAP research via DC as pilot state, to develop industry-wide data solutions.
- Influential speaker, establishing industry presence as a thought leader and maintaining strong relationship with key stakeholders.
- Working with excellence and implementing innovative strategies and plans to improve Groundswell's data science capacities through self-directed research.
- Facilitating implementation of new processes and programs to deliver data-driven solutions, including data privacy and governance in collaboration with IT Department.

Head of Risk Management (9 Months Contract), 10/2019 to 07/2020

LEKA RESEARCH INSTITUTE – City, STATE

- Planned and executed **compliance audits** to check risk management policies, procedures and controls, including validation requirements for clients.
- Managed team of **Data Scientists**, performed price forecasting modeling, conducted performance monitoring, tracked progress, reported status and documented process controls for large bank that passed regulatory audits.
- Developed organizational methods and policies, implemented training initiatives to deliver ongoing awareness of and compliance with established procedures.
- Contributed to professional development of client staff through effective training and mentorship.
- Worked with executive leaders across multiple organizations to deliver project requirements, developed solutions through effective remediation analysis.
- Developed innovative management strategy to optimize business growth including change management plans for execution and effective implementation at operational and strategic levels.

Senior Analyst - Model Validation & Governance, 03/2018 to 10/2019

RISKSPAN, INC – City, STATE

- Developed 9 DFAST/CCAR challenger models. Supervised **3 Analysts, completed 12 projects, involving 35 models** such as prepayment, credit cards, auto loans, and performed scenario analysis for Pre-Provision Net Revenue (PPNR) model, Allowance for Loan and Lease Loss and Current Expected Credit Loss (CECL).
- Developed best **credit risk strategy** to increase customer base, reduce credit risk and maximize profit.
- Identified model risk and improved outcomes by creating highly successful strategies to ensure correct use of credit models, including recommendations for governance and controls.
- Performed valuation analysis and **cashflow modeling**.
- Held team meetings at conclusion of every project. Improved productivity by **125%** - company exceeded growth objectives.

Chief Economist - Research and Development, 03/2013 to 02/2018

BACDU INC – City, STATE

- Developed guidelines for use in economic policy development.
- Delivered specialized consultative economic support to various project teams.
- Presented research and analysis findings in written, tabular and visual format to applicable management teams.
- Built multiple community development programs from inception to implementation, including design of KPIs and program evaluation reports.
- Worked closely with team members to deliver project requirements, develop solutions and meet deadlines.
- Enhanced data collection accuracy by preparing, authoring and updating communications and policy memorandums.
- Surveyed target demographics and evaluated larger market data to make informed assessments.