

PROFESSIONAL SUMMARY

Distinguished Polling, Research & Redistricting Professional with 21 years of expertise in survey methodology, consumer insights, voting behavior, and advanced data analysis. Expert in geospatial analysis, demographic segmentation, and consumer behavior modeling with experience serving major brands, organizations, and political candidates. Regular expert testimony and source on public opinion for journalists, with redistricting analysis used in court cases.

KEY ACHIEVEMENTS AND IMPACT

Expert Testimony & Court Cases

- Regular expert testimony and source on public opinion for journalists, elected officials, and NGO leadership
- Redistricting analysis used in court cases with rigorous methodology and expert testimony
- Conceived, architected, engineered and deployed cloud-based redistricting software used by thousands of analysts nationwide
- Built the first collaborative and multi-actor contributed poll of polls used by the Democratic Party

Research Innovation & Platform Development

- Developed RACSO platform for pollsters to fully administer research, analyzing bids from 1,200 vendors
- Engineered FLEEM system using Twilio API for thousands of simultaneous phone calls for IVR polls
- Designed, architected and created multi-tenant data warehouse tracking decades of political, geographical, econometric change
- Pioneered the integration of advanced mapping techniques into standard reports, including choropleths and hexagonal grid maps

Survey Methodology & Data Analysis

- Overhauled survey methodology and polling operations, significantly improving data accuracy and response rates
- Managed national polling team of five data analysts for consumer insights and market intelligence
- Led multi-million dollar research projects involving sensitive consumer data with privacy compliance
- Developed advanced segmentation models using demographic, psychographic, and behavioral data

CORE COMPETENCIES

Survey Methodology & Research Design: Survey Design and Questionnaire Development for Political and Market Research; Sampling Methodology and Statistical Analysis (R, SPSS, Stata, OSCAR); Random Device Engagement (RDE), Text Message, Web Panel, and Live Telephone Calling; Expert Testimony and Consultation on Research Methodology

Redistricting & Geospatial Analysis: Redistricting Software Development and Boundary Estimation Systems; *Geospatial Analysis* (ArcGIS, Quantum GIS, GRASS, OSGeo, PostGIS); Choropleths and Hexagonal Grid Maps for Demographic Visualization; Court Case Analysis and Expert Testimony for Redistricting

Data Analysis & Visualization: Advanced Statistical Modeling and Analysis (Regression, Clustering, Segmentation); *Data Visualization* (Tableau, PowerBI, Seaborn, Matplotlib, d3.js); Consumer Behavior Analysis and Market Segmentation; Multi-million Dollar Research Project Management

PROFESSIONAL EXPERIENCE

Siege Analytics, Washington, DC | PARTNER 2005 – Present

Polling, Research & Redistricting Leadership

- Conceived, architected, engineered and deployed cloud-based redistricting software used by thousands of analysts nationwide

- Regular expert testimony and source on public opinion for journalists, elected officials, and NGO leadership
- Redistricting analysis used in court cases with rigorous methodology and expert testimony
- Led multi-million dollar research projects involving sensitive consumer data, ensuring compliance with privacy regulations

Helm/Murmuration, Washington, DC | DATA PRODUCTS MANAGER June 2021 – May 2023**Survey Methodology and Research Innovation**

- Overhauled the organization's survey methodology and polling operations, significantly improving data accuracy and response rates
- Managed and developed one of the in-house polling teams, focusing on Random Device Engagement (RDE), text message and web panel collected surveys
- Worked on standardizing questions, survey instruments and call methods, along with building a meta-analytical dataset for longitudinal analysis
- Managed a cross-functional team of eleven data engineers and analysts, establishing best practices for research methodology and data analysis

Myers Research, Washington, DC | SENIOR ANALYST August 2012 – February 2014**Research Design and Survey Operations**

- Developed RACSO, a web application for pollsters to fully administer research including questionnaire creation, versioning, and reporting
- Wrote RFP and analyzed bids from 1,200 vendors before selecting implementation partner for RACSO platform
- Designed comprehensive survey instruments for specialized voting segments and niche markets
- Introduced geospatial techniques to enhance market segmentation capabilities, providing clients with location-based consumer insights

Progressive Change Campaign Committee, Washington, DC | RESEARCH DIRECTOR August 2011 – August 2012**Political Research and Survey Technology**

- Engineered FLEEM, a web application using Twilio's API to make thousands of simultaneous phone calls for IVR polls
- Used FLEEM for early quantitative research in support of Senators Martin Heinrich and Elizabeth Warren
- Led all aspects of survey design, implementation, data analysis, and reporting for major national studies
- Developed new statistical methods for boundary estimation techniques, enhancing geographic market segmentation capabilities