**Dheeraj Chand**

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## PROFESSIONAL SUMMARY

Senior Research & Data Analytics Professional with 15+ years of experience in applied research, data engineering, and software development. Expert in translating complex analytical requirements into scalable technical solutions with proven track record leading cross-functional teams. Deep expertise in survey methodology, consumer insights, voting behavior, and advanced data analysis with experience serving major brands, organizations, and political candidates.

## CORE COMPETENCIES

Research and Analytics • Programming and Development • Data Infrastructure

## PROFESSIONAL EXPERIENCE

### PARTNER - Siege Analytics, Washington, DC | 2005 – Present

Research & Data Analytics Leadership

• Uncovered decades of demographic miscoding in voter files, discovering 500,000+ previously mischaracterized Democratic voters

• Developed Python boundary estimation algorithm enabling mapping and analysis at every level of election in the United States

• Algorithm reduced mapping costs by 75%, saving campaigns and organizations $5M+ and enabling smaller nonprofits to conduct redistricting analysis

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

• Developed and deployed custom research software that processed billions of consumer records for pattern analysis, fraud detection and entity resolution

• Built multi-tenant data infrastructure supporting concurrent access from diverse client organizations

• Led multi-million dollar research projects involving sensitive consumer data, ensuring compliance with privacy regulations

### DATA PRODUCTS MANAGER - Helm/Murmuration, Washington, DC | June 2021 – May 2023

Big Data Analytics and Machine Learning

• Conceived and developed framework using Python, Pandas, and PostgreSQL to clean, validate, and normalize government data from Census, BLS, and NCES

• Built multi-tenant data warehouse and data lake using Snowflake, dbt, and AWS for longitudinal analysis across attitudinal, behavioral, demographic, economic and geographical dimensions

• Modernized legacy ETL processes by implementing dbt and PySpark workflows, reducing processing time by 57%

• Managed teams of seven to eleven engineers, designers, analysts, and external stakeholders using Agile methodologies and modern DevOps practices

### ANALYTICS SUPERVISOR - GSD&M, Austin, TX | November 2019 – June 2020

Data Science and Business Intelligence

• Transformed the small data team into a big data engineering team, going from working on small datasets on laptops to using Hadoop Clusters and Hive on AWS

• Implemented spatial analysis and consumer segmentation methodologies that revealed new insights about existing customers

• Introduced version control and Agile methodologies to the data team, improving project delivery timelines by 40%

• Managed three analysts, mentoring them in advanced market research techniques and data analysis

### SOFTWARE ENGINEER - Mautinoa Technologies, Washington, DC | August 2016 – February 2018

Data Science and Econometric Modeling

• Developed SimCrisis, a GeoDjango web application using Python, PostgreSQL/PostGIS, and NetLogo for multi-agent modeling and econometric simulations of crisis economies

• Built modular application using Python, Django, and GRASS accepting rules extensions for ethnic strife, different crisis types, supply failures, and disaster scenarios

• Conceived and built application using Python, Pandas, and Jupyter to predict how crisis economies respond to different humanitarian interventions

• Liaised with officers from International Federation of Red Cross, UNICEF, and Chaos Communications Congress to improve platform using Docker and Ubuntu

## KEY ACHIEVEMENTS AND IMPACT

### Technical Innovation

• 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

• 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

### Data & Analytics

• Designed, architected and created multi-tenant data warehouse tracking decades of political, geographical, econometric change

• Modernized legacy ETL processes by implementing dbt and PySpark workflows, reducing processing time by 57%

• Developed advanced data pipelines for machine learning applications enhancing consumer segmentation and predictive modeling

• Introduced version control and Agile methodologies, improving project delivery timelines by 40%

### Research & Client Success

• Led multi-million dollar research projects involving sensitive consumer data with privacy compliance

• Managed teams of seven to eleven engineers, designers, analysts, and external stakeholders

• Delivered actionable consumer insights and market intelligence for political candidates and major organizations

• Built comprehensive survey operations platform from RFP through deployment

## TECHNICAL SKILLS

RESEARCH AND ANALYTICS Survey Methodology; Statistical Analysis; Geospatial Analysis; Data Visualization

PROGRAMMING AND DEVELOPMENT Python; JVM Languages; Web Technologies; Database Languages

DATA INFRASTRUCTURE Cloud Platforms; Big Data; Databases; Geospatial

For a more detailed, full description of my experience, please visit my LinkedIn and Personal Site.