

PROFESSIONAL SUMMARY

Experienced data scientist and software engineer with 15+ years of expertise in geospatial analysis, demographic research, and political data. Proven track record of building scalable systems, conducting complex analyses, and delivering actionable insights for campaigns, organizations, and government agencies.

KEY ACHIEVEMENTS AND IMPACT

Uncovered decades of demographic miscoding in voter files, discovering 2.7M previously mischaracterized Democratic voters • Architected and built Ballista Redistricting, cloud-based GeoDjango redistricting software on AWS, backed by OSGeo technology stack, serving thousands of analysts with real-time collaborative editing and Census integration • Built high-performance CRM system handling billions of records with millions of columns, used by tens of thousands of users simultaneously

CORE COMPETENCIES

Software Engineering • Data Engineering • Data Analysis • Geospatial / Demographic Expertise • Research & Analytics • Programming & Development • Data Infrastructure

PROFESSIONAL EXPERIENCE

Siege Analytics | Partner - Austin, TX 2020 - Present

Data Science & Political Analytics

- Uncovered decades of demographic miscoding in voter files, discovering 2.7M 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 73.5%, saving campaigns and organizations \$4.7M and enabling smaller nonprofits to conduct redistricting analysis

Lake Research Partners | Senior Data Scientist - Washington, DC 2018 - 2020

Political Research & Analytics

- Trained staff on building Python tooling for report generation and analysis
- Conducted statistical analysis and modeling for political campaigns and advocacy groups

The Praxis Project | Technical Director - Oakland, CA 2015 - 2018

Technology & Data Infrastructure

- Architected and developed 25 Drupal sites to integrate with membership databases, activism CRMs and government agencies, under guidelines from Kellogg Foundation and Robert Wood Johnson Foundation

Salsa Labs | Senior Software Engineer - Washington, DC 2012 - 2015

CRM & Data Platform Development

- Built high-performance CRM system handling billions of records with millions of columns, used by tens of thousands of users simultaneously
- Interfaced with Government and Activism APIs for seamless data integration

PCCC (FLEEM) | Research Analyst - Washington, DC 2010 - 2012

Political Research & Data Analysis

- Handled tens of thousands of calls using emulated predictive dialer for regulated political surveys

The Feldman Group | Data Analyst - Washington, DC 2008 - 2010

Political Data Analysis

- Trained staff on PHP/MySQL for data analysis and reporting systems

KEY PROJECTS

Polling Consortium Dataset Meta-Analysis (2013 - 2016)

Comprehensive meta-analysis of polling data from tens of polling and mail firms with different methodologies and encoding systems, creating unified analytical framework

Technologies: Python, R, Statistical Analysis, Meta-Analysis, Data Standardization

Impact: Created \$400M dataset that became foundation for modern electoral analytics, estimated current value exceeds \$1B

For a more detailed, full description of my experience, please visit my LinkedIn (<https://www.linkedin.com/in/dheerajchand/>) and Personal Site (<https://www.dheerajchand.com>).

TECHNICAL SKILLS

CODE *Python* (Advanced (Pandas, NumPy, SciPy, GeoPandas, Django, Flask)); *R* (Advanced (Statistical Analysis, Data Visualization)); *SQL* (Expert (PostgreSQL, MySQL, SQLite, Complex Queries)); *JavaScript* (Intermediate (React, Node.js, D3.js)); *PHP* (Advanced (Drupal, WordPress, Custom Development))

COMPUTE *AWS* (Advanced (EC2, S3, RDS, Lambda, CloudFormation)); *Docker* (Advanced (Containerization, Orchestration)); *Linux* (Expert (Ubuntu, CentOS, System Administration)); *Git* (Expert (Version Control, Collaboration, CI/CD))

INTERACT *Drupal* (Expert (4-10, Custom Modules, Multi-site)); *Django* (Advanced (GeoDjango, REST APIs, Authentication)); *Flask* (Intermediate (Web Applications, APIs, Microservices))

MEASURE *ArcGIS* (Expert (Desktop, Pro, Server, Spatial Analysis)); *QGIS* (Advanced (Open Source GIS, Plugins, Automation)); *PostGIS* (Advanced (Spatial Databases, Queries, Analysis)); *GRASS* (Intermediate (Geospatial Analysis, Automation))

PLATFORMS *Tableau* (Advanced (Data Visualization, Dashboards, Server)); *Power BI* (Intermediate (Business Intelligence, Reports)); *Jupyter* (Advanced (Data Science, Notebooks, Visualization))

TRACK *Git* (Expert (Version Control, Collaboration, CI/CD)); *Jira* (Advanced (Project Management, Issue Tracking))