dheeraj.chand@gmail.com
+1 2025507110
GitHub: github.com/dheerajchand

Dheeraj Chand

[RESEARCH, ANALYSIS, ENGINEERING] → UNDERSTANDING

Austin, TX (30.2672°N, 97.7431°W)

PROFESSIONAL SUMMARY

Strategic Product & Platform Professional with 15+ years of experience conceiving, architecting, and delivering innovative software products and platforms. Expert in product management, technical architecture, and B2B SaaS development with proven success leading cross-functional teams and launching platforms used by thousands of users. Deep expertise in translating complex business requirements into scalable technical solutions, managing product lifecycles, and driving product strategy across political, technology, and consulting sectors. Skilled at building products that solve real-world problems and deliver measurable business value.

KEY ACHIEVEMENTS AND IMPACT

Conceived, architected, engineered and deployed cloud-based redistricting software used by thousands of analysts nationwide • Designed, architected and created multi-tenant data warehouse tracking decades of political, geographical, econometric change • Managed teams of seven to eleven engineers, designers, analysts, and external stakeholders across multiple product initiatives

CORE COMPETENCIES

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

PROFESSIONAL EXPERIENCE

Siege Analytics, Washington, DC | PARTNER 2005 – Present

Product Development and Platform Architecture

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

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

• 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 technical architecture decisions for data-intensive applications using Docker, Git, and modern DevOps practices

• Managed complex client relationships across political, nonprofit, and technology sectors using Django/GeoDjango web applications

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

Product Strategy and Platform Development

• 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

• Wrote five-year strategic plans for developing data warehouse using Scala, PySpark, and Apache Spark that became basis of company's distinguishing products

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

• Trained analytical and engineering staff on open source geospatial technology (QGIS, GRASS, OSGeo) for analysis, segmentation, and visualization

dheeraj.chand@gmail.com

+1 2025507110

GitHub: github.com/dheerajchand

Dheeraj Chand

[RESEARCH, ANALYSIS, ENGINEERING] → UNDERSTANDING

Austin, TX (30.2672°N, 97.7431°W)

• Developed advanced data pipelines for machine learning applications that enhanced consumer segmentation and predictive modeling capabilities

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

Product Development and Humanitarian Technology

• 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

• Applied agent-based modeling, statistical analysis and machine learning systems for humanitarian impact assessment

• Developed data models and processing pipelines for sensitive humanitarian data

Myers Research, Washington, DC | SENIOR ANALYST August 2012 – February 2014

Product Development and Research Platform

• 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

• Built prototype in R for comprehensive polling administration and sample file management

• 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

• Standardized reporting methodologies to improve clarity and impact of research findings

Progressive Change Campaign Committee, Washington, DC | RESEARCH DIRECTOR August 2011 – August 2012

Product Development and Survey Platform

• Conceived, architected, and engineered FLEEM web application using Twilio API handling tens of thousands of calls using emulated predictive dialer for regulated political surveys

• Used FLEEM for early quantitative research in support of Senators Martin Heinrich and Elizabeth Warren

• Provided tabular and graphical reporting, with plans for interactive data exploration capabilities

• 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

• Created comprehensive data visualization solutions that improved clients' understanding of complex research findings

Salsa Labs, Inc., Washington, DC | SOFTWARE ENGINEER January 2011 – August 2011

CRM Platform Development and Integration

• Maintained and extended the entire geospatial analysis and reporting tools for a CRM written in Java, JavaScript and MySQL

• Developed custom tile server for WMS (Web Map Service) for geospatial data visualization

dheeraj.chand@gmail.com

+1 2025507110

GitHub: github.com/dheerajchand

Dheeraj Chand

[RESEARCH, ANALYSIS, ENGINEERING] → UNDERSTANDING

Austin, TX (30.2672°N, 97.7431°W)

- Built web applications for voter engagement and campaign management with interactive mapping capabilities
- Integrated third-party APIs and data sources for campaign tools with visual representation
- Collaborated with political strategists to translate requirements into technical solutions with focus on platform development
- Developed geospatial visualization tools using GeoTools, OpenLayers, and TileMill

TECHNICAL SKILLS

PRODUCT MANAGEMENT & STRATEGY *Product Conception & Ideation* (Market Research, User Needs Analysis, Opportunity Assessment); *Product Architecture & Design* (Technical Architecture, System Design, Scalability Planning); *Product Lifecycle Management* (Roadmap Development, Feature Prioritization, Release Planning); *B2B SaaS Development* (Multi-tenant Architecture, Platform Strategy, API Design); *Product Strategy* (Market Positioning, Competitive Analysis, Go-to-Market Planning); *Stakeholder Management* (Client Relations, Executive Communication, Cross-functional Leadership); *Product Analytics* (Metrics Development, Performance Monitoring, User Behavior Analysis)

TECHNICAL PRODUCT DEVELOPMENT *Full-Stack Development* (Python (Django/GeoDjango), JavaScript, React, PostgreSQL); *Cloud Platforms* (AWS (EC2, RDS, S3), Google Cloud Platform, Microsoft Azure); *Big Data Technologies* (Apache Spark, PySpark, Hadoop, Snowflake, dbt); *Database Design* (PostgreSQL/PostGIS, MySQL, Oracle, MongoDB, Neo4j); *API Development* (RESTful APIs, Microservices, Third-party Integrations); *DevOps & Deployment* (Docker, Git, CI/CD Pipelines, Automated Testing); *System Integration* (Legacy System Modernization, Data Pipeline Development)

PLATFORM & INFRASTRUCTURE *Multi-tenant Architecture* (Scalable Platform Design, Data Isolation, Performance Optimization); *Data Warehousing* (ETL/ELT Pipelines, Data Governance, Quality Control); *Geospatial Platforms* (PostGIS, ArcGIS, Quantum GIS, OSGeo Integration); *Real-time Systems* (Streaming Data, Event-driven Architecture, Live Updates); *Security & Compliance* (Data Privacy, Access Control, Regulatory Compliance); *Monitoring & Analytics* (Performance Metrics, System Health, User Analytics); *Documentation & Training* (Technical Documentation, User Guides, Team Training)