

## 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.

## 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

### 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

### 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

## **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

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**

**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)

**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); *API Development* (RESTful APIs, Microservices, Third-party Integrations)

**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); *Security & Compliance* (Data Privacy, Access Control, Regulatory Compliance)