## OSCAR CARDEC

Williamsburg, VA 23185 (757) 746-9999 | ocmain@gocardec.com

## LEAD DATA SCIENTIST | CYBER INTELLIGENCE ANALYST | PROJECT MANAGER

Lead Data Scientist, United States Air Force Veteran and Cyber Intelligence Analyst with an active TS security clearance and over 20+ years of proven experience directing personnel and resource management, adhering to, and enforcing standards and regulations, and balancing multiple projects while still maintaining a focus on providing quality results. Possess a comprehensive background knowledge in machine learning and predictive analytics, intelligence analysis, strategic planning and management, and cyber intelligence operations derived from steering domestic and global operations. Reputation for exceeding customer expectations, multi-tasking, organizational skills, and attention to detail. Strong leadership skills: able to prioritize, delegate tasks, and make sound decisions quickly while maintaining focus on the mission to effectively implement program goals.

- Cross-Functional Leadership
- Machine Learning | Data Analysis
- Cyber Intelligence Analysis
- Critical Thinking & Analysis
- Security Manager & Operations
- Program | Project Management
- Team Building
- Business Intelligence
- Statistical Inference

#### PROFESSIONAL EXPERIENCE

# GovCIO | Remote Data Scientist – Machine Learning Specialist

2023 - Present

- Headed machine learning efforts, research, and development of initiatives in support of a federal client's infrastructure
  operations office. Led data mining and anomaly detection across varied information management systems exposing
  insights and trends related to systems performance, availability, and reliability. Organized Splunk MLTK training
  modules and adopted capabilities to support daily operations.
- Conducted quantitative analysis using operations research monitoring tools, time-series forecasting and other quantitative techniques in the areas of procedural implementations and performance issues of on-premises, hybrid, and cloud-hosted systems and applications. Overhauled definition of machine learning and data mining strategies that support automation of rational decision-making, workflow analysis.

# Deloitte & Touché, LLP | Richmond, Virginia Lead Data Scientist (2021 - 2023)

2021 - 2023

- Led data analysis efforts in support of Federal Agency's, Operation Support Directorate asset allocations using historical data. Provided coaching and guidance to junior staff throughout the entire cycle of data mining. Clarified project requirements and implemented best practices through data ingestion, exploratory data analysis, feature engineering, linear regression, and random forest modeling, while ensuring quality control business rules. Established groundwork for future product iterations. Project outcome and data insights delivered via Qlik interactive dashboard.
- Reinforced Program Integrity sub-offering effort (formerly Anti-Fraud Enterprise Solution) application services in detecting fraud, waste, abuse, and improper payments across medical claims. Responsible to updated scripted logic, auditing processes, and rules documentation. Automated detection of inaccurate and fraudulent medical statements or claims.
- Led analytic proof of concept in support of State-level Department of Public Health's initiatives. Assessed State-wide vaccination rates across different demographic group, conditions, and factors. Developed and adopted K-means algorithm to assess fused data, conducted analysis of variance, and poststratification statistical analytics. Presented predictive model prototype, uncovered vulnerable sectors and vaccination campaign reprioritization options.
- Advanced US Air Force's ACC A3 Analytics FORGEN offering. Consolidated data strategy and data sources ingest;
   coordinated development of end-user web interface, enabling swift data insight to key decision makers.
- Reinforced Strategic Growth Offering (SGO) propositions by advancing analytic practices, topic-modeling, sentiment analysis, and social network analysis models in support of SGO's Mis-Disinformation exposure and countering solutions. Liaised with Cyber Thread Hunt initiative to explore augmentation of SGO efforts with Internet domain name system traffic analytics.

### U. S. Air Force | Various CONUS Locations Functional Manager (2019 – 2021)

2000 - 2021

Performed intelligence collection functions from start-up through completion; ensured that personnel, physical, and information security policies were adhered to; improved operational capabilities by 85%. Delivered over 1200 briefs to command leadership and government officials that provided advice, guidance, and consultation on the implementation of intelligence collection procedures.

 Managed over 2,600 Intelligence Analysts, liaised career management with Headquarters, Air Force and Major Command leadership. Directed personnel allocations and training, shaping, and balancing the intelligence analysis workforce in support of 7 Intelligence, Surveillance, and Reconnaissance (ISR) and Cyber Wings. Expedited manpower allocations in response to Northern Command needs. Coordinated with Air Force Personnel Center to expedite mobilization of personnel to support critical vacancies. Bolstered U.S.- Canada Air Defense Charter and its capabilities.

### Manager, Intelligence Operations (2017 – 2019)

Provided concise and timely recommendations to executive management and staff on tracking and vetting intelligence information which reduced administrative and field operation errors by 80%. Synchronized the department's initiatives, dedicated modeling, and simulation, and provided solutions for a workforce consisting of more than 1,300 personnel which nested with the parent organization's strategic plan.

- Led operations for over 1,300 members and 4 different squadrons in support of national and U.S. Air Force ISR missions, oversaw daily management of weapon system programs. Optimized Distributed Common Ground System (DCGS) analysis and reporting program. Supervised DCGS dissemination of 1,200 intelligence reports, sustaining 1,700 full-motion video operations and 5 Force Task's hostages rescues.
- Led 50 joint member team in support of analysis and reporting of foreign missiles and aerospace activities. Led multisource data collection, extraction-transformation-loading process, and auditing. Analyzed SIGINT metadata, developed target assessments, time-series, geospatial data dashboards, and new analytic vectors; ensured data indexing.
- Organized and directed 6 building infrastructure refurbishes, appraised, and approved \$170k in technology requirements, preserved Wing Authorization to Operate (ATO) for over 6,000 military members.

#### Senior, Intelligence Analyst (2014 – 2017)

Advised the Commanding Officer on all matters relating to tactical level intelligence, maintaining full battlespace awareness of any items that may relate to friendly or enemy forces. Facilitated the use of intelligence in planning and execution, as well as scenario production and development to support operations.

- Oversaw counterterrorism (CT) operations for over 340 joint personnel responsible to assess over 7,200 global targets
  and revalidated 120 cyber objectives, steering vital CT actions in response to 6 Combatant Commands requirements.
  Led 30-member team in counter-proliferation mission, root cause analyses, exposed \$1.5B illicit aircraft purchase and
  3,300 illicit flights, liaised insight to Treasure, resulting in the issuance of 8 international sanctions. Orchestrated USGdirected mission, coordinated Force Protection across 5 national organizations, ensured over 200 USP returned safe to
  the Homeland.
- Directed analytical activities for 20 members in support of Computer Network Operations, ensuring tailored collection planning, threat analysis, and sustainable ISR expertise to execute aerospace operations. Prepared target assessments, adversary studies, and situational reports. Synchronized DoD exercise across Numbered Air Force and North American Aerospace Defense (NORAD) Command, advanced first National Aviation Crisis Management Framework.

#### **EDUCATION**

Master of Science, Data Analytics | University of Maryland Global Campus | College Park, Maryland Bachelor of Science, Information Technology Management | American Military University | Charles Town, West Virginia Associates of Applied Science, Intelligence Studies | Community College of the Air Force | Montgomery, Alabama

#### TECHNICAL COMPETENCIES

Operating Systems: Microsoft Windows | Linux | MacOS

**Tech Stack:** Python for Machine Learning | C# | SQL | Git | IBM Cognos Analytics, RPA | SAS E-Miner | Microsoft Suite | R-markdown | plotly | Tableau | Shiny | R & RStudio | tidyverse | tidygraph | caret | H2O | pytest | SimPy | pandas | numpy | statsmodels | pySpark | spaCy | GeoPandas | scikit-learn | pytorch | seaborn | BeatifulSoup | Scrapy | Selenium | koRpus | Quanteda | NLTK | matplotlib | Faker | SDV | AWS | Azure | GCP | Databricks | Splunk MLTK | Datawrapper | Label Studio | NLP | Jupyter NB | Visual Studio Code | ServiceNow