David Saunders

2987 District Ave, Fairfax Virginia 22031 APT 520 | 434-987-2200

David.Saunders@Leidos.com

Saunders.David,Mail@Gmail.com

Work: Leidos, Buckeye Imagery Program (2016 – present) 7 OCONUS Deployments

Geospatial Analyst

Electro-Optical Processor (2016 – present)
Technical Operations Lead (2018 – present)
Electro-Optical Trainer (2016 – July 2020)
Electro-Optical Training Manager (July 2020 – present)

Education: James Madison University, Harrisonburg VA (2012 - 2016) Cumulative GPA: 3.4

Bachelor of Science, College of Integrated Science and Engineering Deans List: 5 Semesters
Major: Geographic Science Major GPA: 3.6
Major: Intelligence Analysis Major GPA: 3.5
Concentrations: Applied Geographic Information Systems, Geospatial Intelligence
Capstone Research: *National Geospatial Intelligence Agency - Development of Geospatial Indicators for the Analysis of Food Security in West Africa* (Winner of the 2016 USGIF GEOINT Symposium Presentation)

Work Experience: Geospatial Analyst, Leidos Buckeye Imagery Program.

The Buckeye program's mission is to rapidly collect, process, and distribute unclassified high resolution maps, high accuracy color imagery, and elevation data to US troops and allies overseas. Contracting out to the Army Geospatial Center's US Army Corps of Engineers, these products are used to provide immediate humanitarian, tactical and situational awareness to support IMINT/GEOINT ISR collections services and military operations overseas.

- **Electro-Optical (EO) Processor:** (2016 – Present)
  - Process raw remotely sensed imagery collected from manned and unmanned aircraft to create finalized 2D cartographic maps, 3D imagery-elevation overlays and color balanced orthorectified mosaics.
  - Perform and create basic scripts to automate GIS applications and processes.
  - Producing real-time vector and raster geospatial products that were disseminated to on and offsite customers to support GEOINT and IMINT collection services for military operations.
- **Technical Operations Lead:** (2018 – Present)
  - QA/QC of finalized maps, imagery mosaics and LiDAR elevation models.
  - Developing large-scale scripts to improve workflow automation and redundant processes in GIS applications.
  - Acting as mentor and leader in an overseas team environment to ensure high team morale and team performance
  - Conducting mission essential pre-flight flight planning, post-flight reporting and geodatabase management
- **Electro-Optical (EO) Trainer:** (2016 – July 2020)
  - Educating employees on map creation, 3D imagery-LiDAR overlays and color balanced orthorectified mosaics
  - Educating employees on GIS, Cartographic and Programming skills required for deployed operations
  - Evaluating employees on work training performance and identifying improvements in their workflow
  - Provides technical solutions that will address any issues encountered during training cycle.
- **Electro-Optical (EO) Training Manager:** (July 2020 – Present)
  - Providing managerial support to training team and student body on map creation, 3D imagery-LiDAR overlays and color balanced orthorectified mosaics.
  - Manages the development of scripts to improve workflow automation and redundant processes in GIS applications. Updates and improves workflow for efficiency and automation.
  - Manages all training education materials including the development of training education curriculum, plans, general GIS training, modules, presentations, journals, handbooks, rubrics and deployment simulations.
  - Manages delivery of internally and externally provided training. Defines and manages program specific EO GIS practices and procedures.

Relevant Research and Professional Experience:

- Research work with the National Geospatial Intelligence Agency. Created a GIS model that utilized remote sensing and intelligence analysis techniques to predict food security crises in Africa. Research techniques included Normalize Difference Vegetation Index (NDVI), Evapotranspiration Measurements (ETA), Soil Moisture Indices, Land Use and Land Cover Classifications, Conflict analysis, infrastructure analysis and population density.
- Has provided GIS training support to the U.S. Army Corps of Engineers Army Geospatial Center, educating government customers and military personnel on how GIS and Buckeye can provide mapping solutions to support their needs.
- Training education mentor and leader during times of program expansion. Has trained over 100+ employees on program specific GIS workflow, expectations and duties in theater. Manages team of educators for appropriate content delivery.
- Has worked with internal program SMEs and external software vendors to identify GIS workflow inefficiencies. This includes testing new software applications and GIS user interfaces, identifying potential areas of programming automation and standardizing best practices in program workflow. Has led multiple briefings and support meetings.

GIS, Cartography, Programming and Computational Skills:

- **GIS:**
  - Geo/Orthorectification (intermediate)
  - Raw and finalized Imagery / LiDAR QC
  - Geodatabase management (intermediate)
  - Utilizing various geospatial editing techniques for analysis purposes (advanced)
  - Remote sensing data processing (advanced)
  - Vector and raster data models (advanced)
  - Imagery interpretation and analysis (basic)
  - Spatial analysis (advanced)
  - Feature Digitization (intermediate)
  - GIS file formats (advanced)
- **Cartography:**
  - Cartographic / graphic design, symbolization and color principles (intermediate)
  - Working with both vector and raster layers in map production and editing (advanced)
  - Understanding of map projections and coordinate transformations (intermediate)
  - Open-source metadata and relational databases (excel /CSV format – intermediate)
  - Providing technical support to cartographic production (intermediate)
  - Plotting large scale maps for official use applications (advanced)
- **Programming and Developing:**
  - Python (intermediate)
  - Visual Basics (basic)
  - SQL (intermediate)
  - Testing and debugging applications for automation (intermediate)
  - Python model building in ArcGIS (basic)
  - GDAL commands (basic)
  - SQL database management (basic)
  - Programming applications in GIS (basic)
- **GIS Technology:**
  - QGIS (advanced)
  - ESRI ArcGIS (advanced)
  - Google Earth Pro (advanced)
  - Adobe Illustrator (intermediate)
  - PCI Geomatica (intermediate)
  - Collector for ArcGIS Mobile (intermediate)
  - Falcon View (advanced)
  - Trimble GPS (intermediate)
  - QT Modeler (advanced)
  - Bentley: Microstation (intermediate)
  - Inertial Explorer (advanced)
  - Adobe Lightroom (advanced)
  - Capture One (advanced)
  - Inpho Applications Master Suite (advanced)

Education: Relevant Course Work

- **GIS and Cartography:** Cartography and GIS, Geographic Information Science, Earth Observation and GPS, Spatial Thinking and Problem Solving, Cartography and Geospatial Visualization, Visualization Methods Technology and Tools, Practicing GIS, Principles of Remote Sensing, Processing Remotely Sensed Data, Introduction to Statistics
- **Programming and Data Analysis:** Programming and Problem Solving, Applications of GIS and Programming, Data Mining Models and Knowledge Discovery, Selected topics in IA: Geospatial Intelligence, Problem Solving Applications in Science and Technology