

Gage (Geal) Sarrett

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SUMMARY

- Scheduled to separate from U.S. Air Force, available for employment starting July 2023
- Recently graduated from Pennsylvania State University with Master's of Science in Spatial Data Science
- Current Air Force GIS Analyst and Land Survey Supervisor looking to become a great Software Developer
- Proficient coding in Python, JavaScript and C/C++
- Experience using a variety of software packages and extensions within the GIS domain
- Constantly looking to expand software development process skills, library knowledge and computer science theory to improve upon software engineering skills
- Currently holding Secret Security Clearance

PROFESSIONAL EXPERIENCE

United States Air Force, Engineering Assistant

Deployed Location, Jordan, Jan 2023 – May 2023

GeoBase/Execution Support Section Supervisor in Charge

- *Managed and mentored 6 personnel team*; guided in completing 140 customer requests, supporting over 2,000 staff and \$2 billion in operation expenses.
- *Oversaw geospatial data program*; coordinated with 13 data steward organizations to provide consolidated and up to date data, performed monthly data QAQC according to SDSFIE standards for 400 classes of features with 3200 average field edits per month.
- *Led expeditionary survey teams*; aligned \$1 million Aircraft Arresting System repair ensuring safe operation of 56 aircraft worth \$1 billion, located and evaluated site location for \$2 million remote runway project supporting airlift rescue operations
- *Coordinated joint engineering work*; prepared 17 projects for the U.S. Army; saved \$1.9 million in costs for living area setup; set up a network hub for the region
- *Orchestrated mapping efforts for base training exercises*; identified changes need for reconnaissance routes, prepared simulated base recovery action plans in record time
- *Drove the construction of 17 permanent location reference points*, used by military and contractor construction teams to verify accuracy of new construction, established centimeter level of accuracy with enduring solution

Ellsworth Air Force Base, SD, Jan 2022 – Dec 2022

GeoBase GIS Projects Section Lead

- *Oversaw completion of projects and customer requests*, assigned tasks and guided section members as needed
- Manage new employee first year training program, assured early and comprehensive completion for 5 individuals
- Designed new weekly professional development training program for GIS and survey topics for team of 15 members greatly expanding unit's toolset and capabilities
- Designed road transportation network model that is now utilized for efficient analysis and traffic planning

Ramstein Air Base, Germany • Dec 2019 – Dec 2021

GIS and Engineering support for 86 Civil Engineering Squadron (CES)

- Develop python scripts and tools to not only save labor hours but also verify data accuracy as well as integrity. For example, design tools that convert and project AutoCAD drawings digital library into GIS formats that facilitate and improve the converting, reviewing, and editing process. Tools are adopted by 86 CES to create building floor-plans for the entire base, saving roughly 2/3 of the time, over 400 hours
- Establish interactive web map applications to improve leadership decision-making capabilities, such as base development plan and contracting fund allocation
- Maintain GIS data for all U.S. Air Force units' installation assets in the Kaiserslautern Military Community, serving a population of over 75,000
- Assist in data migration of installation's database from version 3.1.1 to 4.0.1.3 of the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE).
- Conduct data collection and survey using GNSS/GPS, LiDAR measuring devices, and optical equipment
- Provide substantial planning and GIS support for Operation Allies Refuge as Ramstein AFB forms a tent city capable of housing 20,000 Afghanistan evacuees within a week

VOLUNTEER

Humanitarian Open Street Maps

- Digitize buildings in Africa to aid local governments in providing Covid relief services

EDUCATION

M.S. Spatial Data Science

Pennsylvania State University, May 2023

- *Thesis written on A Time-Lagged Intersection Method for Mapping and Localization from Monocular Camera System*; Proposed a new computational method for localizing and mapping data from autonomous vehicle sensors, explored computer vision techniques in object detection, fine-tuned YoloV7 model on OpenImages dataset

Graduate Certificate, Geospatial Programming and Web Map Development

Pennsylvania State University, May 2022

B.A. Sociology, Theatre

Case Western Reserve University, May 2015

SKILLS

- **Geospatial Software:** ArcGIS Pro (3.0), ArcMap (10.8), ArcGIS Online, QGIS (3.22)
- **Programming Languages and APIs:** Python, JavaScript, C++, HTML/CSS, ArcGIS APIs, Leaflet
- **Software Frameworks:** AWS, Django, REST
- **Databases:** SQLite, Postgres, PostGIS
- **Other Software:** Apache Server, Linux Operating System (Debian-Based), AutoCAD.
- **Survey Equipment:** Trimble SX10, Trimble R10, Trimble S7

AWARDS

- Air Force Achievement Medal, 2021
- Engineering Assistant Apprentice (Air Force Course), 2019 – Distinguished Graduate.
- Air Force Basic Military Training Honor Graduate.

TRAINING AND CERTIFICATIONS

- AWS Certified Cloud Practitioner
- HarvardX/edX CS50 Web Programming with Python and Javascript – 100 hrs
- Construction Survey (Air Force Course) - 40 hrs
- ESRI Training: Deploying and Maintaining Multiuser Geodatabase – 16 hrs, ArcGIS Pro – 32 hrs, Python Scripting – 12 hrs, Spatial Analysis – 16 hrs
- Trimble – SX10 Training – 40 hrs
- AutoDesk AutoCAD training – 40 hrs