

James W. Sewall Company
POSITION DESCRIPTION

TITLE: 3D Solutions Analyst
MANAGER: Reality Capture Manager
REPORTS: None

BUSINESS UNIT: Geospatial Services
EXECUTIVE: VP Geospatial Services
STATUS: Full-time, non-exempt

ABOUT THE POSITION: Sewall is seeking an experienced photogrammetry & remote sensing data analyst to work on our active and growing Remote Sensing and 3D Data Services Team. The 3D Solutions Analyst will work in a team-oriented environment assisting the Team with planimetric feature extraction, point cloud data rendering, building information modeling (BIM), and 3-dimensional drafting off of data captured using data captured with aerial or terrestrial imagery or aerial, mobile, and terrestrial LiDAR. This includes fixed wing aerial imagery, unmanned aerial vehicle (UAV) imagery, and/or LiDAR data captured with aerial, mobile, or terrestrial data capture methodologies. The ideal candidate will have a well-rounded and diverse portfolio of experience in the survey, UAV, and photogrammetry fields and should be familiar with data capture and data processing techniques from a variety of deployment configurations (aerial, mobile, terrestrial, hydrographic, etc.). We are looking for a candidate who is comfortable working with minimal supervision and can interact with other engineering personnel and 3rd party contractors or clients.

QUALIFICATIONS:

- 5+ years' working experience in a production environment associated with Cardinal VROne and VRTwo photogrammetric compilation software
- 5+ years using Trimble Inpho and MatchAT software or equivalent for aerotriangulation solutions
- 3+ years of experience working with, processing, classifying, and extracting point cloud data and derivatives
- 2+ years of experience with UAV data capture and processing
- 2+ years of experience in a 3D drafting and modeling environment (Autodesk products preferred)
- Practical and demonstrated experience planning aerial surveys
- Practical and demonstrated experience developing aerotriangulation (AT) solutions and orthophotography
- Proficiency in ESRI ArcPro
- Familiarity with Trimble Business Center
- Associates degree or higher in photogrammetry, land surveying, engineering, cartography, or equivalent

JOB DUTIES AND RESPONSIBILITIES:

- Ability to work with, classify, and extract data from point cloud datasets
- Ability to configure an aerial imaging project for aerotriangulation and orthophotography development using Trimble software
- Ability to set up, compile, and QC a project in its entirety using Cardinal VROne/VRTwo software in a softcopy stereo environment
- Aid in coordination of data collection planning tasks, including, but not limited to, UAV versus fixed-wing aircraft deployment
- Provide GIS support on an as-needed basis
- Provide an accurate projection of time needed to complete specific tasks while also accurately tracking time spent on project assignments
- Willingness to be cross trained in different software and market areas
- Demonstrated ability to develop learning material, deliver effective training and provide training to other Sewall project stakeholders
- Works safely and promotes safety within the work environment. This includes good posture at workstation; is proactive in getting needed assistance to maintain an ergonomically correct workstation
- Ability to function efficiently using various formats of data in order to: differentiate color, see in stereo, and interpret hard copy source documents and digital data

COMPETENCIES REQUIRED:

- Highly experienced using Trimble photogrammetry software
- Highly experienced setting up and working through 3D data extraction project workflows, including stereo compilation and parametric modeling
- Proficiency and practical experience using ArcGIS 10.x, including model builder and/or ArcPy development
- Proficiency and experience with a wide variety of geospatial data (GIS) formats, datasets, and applications
- Practical, hands-on approach to problem solving
- Knowledge of surveying fundamentals including, but not limited to, conventional survey, photogrammetry, UAV, LiDAR and point cloud data development

KEY PERSONALITY TRAITS REQUIRED TO SUCCEED IN THIS POSITION:

- Outstanding internal and external communication and client management skills
- Ability to thrive in a production environment
- Strong work ethic
- Approachable
- Demonstrates an interest in further development in the assigned function area by asking questions, taking on new tasks, and seeking guidance
- Demonstrated ability to work on aggressive deadlines for multiple projects at once

RELATED EXPERIENCE AND/OR EDUCATION VALUABLE TO SUCCEED IN THIS POSITION:

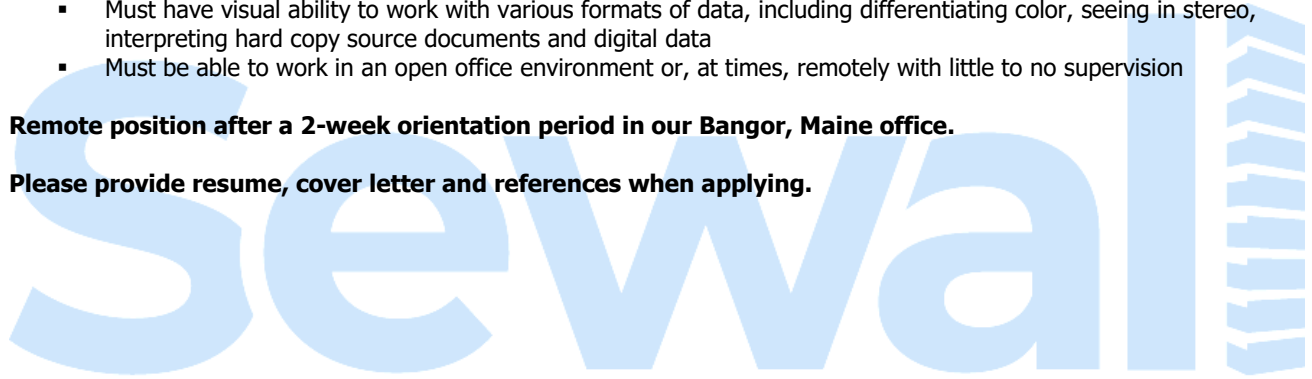
- Experience in Engineering, Surveying, and/or Architectural discipline(s)
- Commercial UAV pilot license preferred
- Project management experience preferred
- Experience with mobile LiDAR a plus
- Knowledge and understanding of land surveying techniques and remote sensing technologies
- Familiarity using Trimble Business Center and Trimble Realworks or equivalent point cloud modeling software
- Experience using Sketchup, Trimble Realworks or equivalent a plus
- Experience with Hypack and bathymetric survey a plus
- General knowledge of Microsoft Office suite (Word, Excel, Access).

PHYSICAL DEMANDS:

- Must be able to sit at a computer workstation (2D and 3D) for extended periods of time on a daily basis. The continuous use of a keyboard and mouse throughout each day will be necessary
- Must have visual ability to work with various formats of data, including differentiating color, seeing in stereo, interpreting hard copy source documents and digital data
- Must be able to work in an open office environment or, at times, remotely with little to no supervision

Remote position after a 2-week orientation period in our Bangor, Maine office.

Please provide resume, cover letter and references when applying.



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