

## **BIOGRAPHICAL SKETCH**

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Dr. Shannon Albeke is a Senior Research Scientist and GIST Faculty member. He holds a Bachelor of Arts degree in Environmental Sciences, with minors in Biology and Geography in 1997 from the University of Colorado – Boulder. After graduation, he began an 8-year career as an Aquatic Habitat Biologist for the Colorado Division of Wildlife and by necessity learned how to be a GeoSpatial Data Scientist. Dr. Albeke received his PhD from the University of Georgia – Warnell School of Forestry and Natural Resources in 2010 as well as becoming a member of WyGIS.

Dr. Albeke's general research interests center around applied GIS, programming and statistics. Specific interests include: 1) Modeling of ecological processes across broad spatial extents and multiple scales. 2) Facilitation of Data Science workflows using cutting edge modeling, programming and data management techniques. 3) Promote and enable scientific outreach to others through open-data portals and visualization tools. 4) Use of UAS for estimation of vegetation community assembly and biomass.

Over the last ten years, Dr. Albeke has served as PI or Co-PI for more than \$3.5M in external contracts and grants at the University of Wyoming. Major funding sponsors have included the National Science Foundation, U.S. Fish and Wildlife Service, National Parks Service, NASA Space Grant, US Geologic Survey, Colorado Parks and Wildlife, Montana Game and Fish, New Mexico Game and Fish, Utah Division of Natural Resources, Wyoming Game and Fish, Wyoming State Water Engineers, Western Native Trout Initiative, Grants for Assessing the Benefits of Satellites, along with several University of Wyoming grants. His 49+ publications include a wide range of refereed journal articles, conference proceedings papers, technical reports and book chapters.

Dr. Albeke's teaching is aimed more toward graduate-level education and professional development for non-academic personnel. He prefers to use and promote open source software within classes, with a strong focus on applied GIS and Data Science. In addition to his UW courses, Dr. Albeke conducts several courses, both online and face-to-face, teaching data wrangling techniques with Program R to wildlife professionals in State and Federal Agencies.