

Meeting Workforce Needs with Virtual GIST (Geospatial Information Science Technology)

Virtual Geospatial Information Science Technology Education. (GIST) – (Award Number: 1955256)

Our goal is to meet the growing need for highly skilled geospatial technicians by giving more students the opportunity to earn credentials that lead to rewarding careers, and by supporting professionals who want to advance in their current positions.

OBJECTIVES

- Offer Virtual AAS degree program in Geospatial Information Science & Technology, providing more students in our community with a strong career path and the flexibility of online study. (expected 2022)
- Provide Virtual Micro-credential for current GIST professionals to enhance marketable career skills and value to employers. (expected 2022)
- Develop new GIST courses that provide students with the highest level of career preparation: GEG 236 (GIST Database Acquisition and Management), GEG 237 (Web Mapping), and GEG 238 (Programming for GIST). (expected as early as fall 2021)

ACTIVITIES

- Virtual Internships
- GIST Summer Camps for school-age children
- Innovative Outreach: Librarian and Alumni Mentoring Programs

GRANT DELIVERABLES COMPLETED

- Modify GeoTech's Web Mapping, UAS Data Acquisition and Management, and Introduction to Programming for GIS to tie into regional GIST industry needs (Obj. 1)
- Submit AAS GIST & micro-credential program through curriculum process (Obj. 1)

YEAR 1 GRANT DELIVERABLES IN PROGRESS

- Twenty (20) students enrolled in online Cartography and Spatial. Thirty (30) enrolled in online Cartography.
- Sixteen (16) students will enroll in online GIST Capstone Course, and 14 will pass (Obj. 2).
- Provide 120+ hours of online support from Alumni GIST/student mentors (Obj. 3) Thirty (30) hours of online support as of Oct 6.

- Six students will complete a virtual internship (Obj. 4)
- Two recent graduates will receive a paid internship (Obj. 4).
- Ten public and 10 MCC librarians will participate in professional development (PD) (Obj.5) 10 public and 5 MCC librarians have participated thus far.
- Forty (40) students will utilize the public library to access the virtual geospatial desktop (Obj. 5)
- Ten high school students will attend GIST Summer camp (Obj. 6)

PARTNERSHIPS

NY State Department of State at University of Albany, Genesee Land Trust, National GeoTech Center of Excellence, New York Geographic Alliance, GIS Scholars, EagleView, GIS-SIG, Water for South Sudan, River Area Council of Governments, Tug Hill Commission, and Genesee River Watch, MCC Library Staff, Rochester Regional Library Council, Monroe County Library System, Pioneer Library System, iSchool Syracuse University, Keith Jenkins (Cornell University Geospatial Applications Librarian, Rochester City School District, Upward Bound

PI AND CO-PI NAMES AND CONTACT

Jonathon Little: PI and Associate Professor of Geography/ GIST; jlittle@monroecc.edu

Heather Pierce: co-PI & Assistant Professor of Geography/ GIST; hpierce@monroecc.edu

Catherine DuBreck: co-PI & EagleView; cdubreck001@ monroecc.edu

Wayne Howard: Senior team member, Adjunct, & co-founder Solara Concepts; whoward11@monroecc.edu

Alumni Mentors: Drew Ortego, Catherine DuBreck, Kareem Howard, & Enith (Annie) Lay Soler

NSF External Evaluator: Donna Lange, Rochester Institute of Technology Professor/PI DeafTEC





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Grant web site: <u>https://atecentral.net/msites/MCC_GIST</u> MCC GIST program web site: <u>https://www.monroecc.edu/depts/geography/</u>