**SHELBY R. INGRAM**

1525 Grayson Hwy Apt 1508, Grayson GA 30017 | 980.207.9461 |Shelby.ingram@uga.edu |

**EDUCATION**

**Bachelor of Science, Atmospheric Sciences: Climatology, May 2018**

University of North Carolina Asheville, Asheville, NC

**Master of Science, Geography/Atmospheric Sciences, May 2022**

University of Georgia, Athens, GA

**RESEARCH EXPERIENCE**

***Gulf of Mexico Transportation and Infrastructure: Evaluating the Potential of CYGNSS Wind Data to Assess Tropical Storm Impacts on Energy Infrastructure in the Gulf of México*.** Part-time Employee (SSAI/NASA DEVELOP). Supervised by: Helen Baldwin. September-November 2018.

***Utilizing Extreme Precipitation Estimates from NASA and NOAA Earth Observations to Enhance Decision Support for Extreme Events in the Carolinas*.** Independent Research Consultant (NASA DEVELOP). Carolina Disasters: Supervised by: Aaron Mackey. January-April 2018.

***Permafrost decline in the Barrow Sea in AK*.** Primary Investigator (University of North Carolina Asheville). Supervised by: Christopher Hennon. January-May 2017.

***Using SLOSH to predict storm surge in the Gulf of Mexico*.** Primary Investigator (NSF Research Experience for Undergraduate North Carolina A&T University). Supervised by: Solomon Bililign. June-August 2015.

**Presentations**

***Northern Forest Food Security & Agriculture II: Identifying Environmental Stressors Impacting Sugarbush Longevity and Maple Syrup Agroforestry in the Northern Forest*.** 12th Southern Forester and Natural Resource Management GIS Conference. December 2019. Poster.

***Master of Ceremonies at NASA DEVELOP Southeast Regional Closeout (August 2019)***

***Master of Ceremonies at NASA Annual Earth Science Showcase* (August 2019)**

Maintained the flow and cohesion of speakers and events during the showcase.

***Gulf of Mexico Transportation and Infrastructure: Evaluating the Potential of CYGNSS Wind Data to Assess Tropical Storm Impacts on Energy Infrastructure in the Gulf of México*.** NASA DEVELOP Alabama Closeout. November 2018***.*** Oral Presentation and Poster.

***Utilizing Extreme Precipitation Estimates from NASA and NOAA Earth Observations to Enhance Decision Support for Extreme Events in the Carolinas*.** NASA DEVELOP Southeast Regional Closeout. March 2018. Oral Presentation and Poster.

**EMPLOYMENT**

**Graduate Research Assistant (2020-2022)**

* M.S. student working with Dr. Thomas Mote at the University of Georgia on tasks focused on Saharan Air Layer effects in the Caribbean. Specifically, WRF was used to model the impact of Saharan dust on drought in Puerto Rico. Occasionally tasks included attending NOAA Drought Task Force meetings and networking with researchers in Puerto Rico. This work was funded by the NSF LUQ IV grant.

**Science Systems and Applications Inc., NASA DEVELOP (2018-2020)**

* As a participant of the program, my responsibilities included producing a technical paper, communicating with project partners, and creating deliverables to meet their needs (**Spring and Fall 2018**).
* As a project lead, my responsibilities included being the point of contact for community partners and DEVELOP’s National Program Office. Duties also included assigning tasks to each team member **(Fall 2018).**
* As a Project Coordination Fellow, I supported teams across the 11 locations in Earth science project development. I edited proposals, technical deliverables and additional science communication materials **(Dec 2018-Sept 2019).**
* The duty of DEVELOP Athens Lead/Project Coordination Fellow entailed developing Earth science projects for the Georgia location of the program – including soliciting partners, hiring and supervising teams, and writing proposals. Responsibilities also included assisting other locations in project development as well as editing technical deliverables and other science communication materials (**Sept 2019-August 2020**).

**University of North Carolina Asheville Pre-rendezblue Supervisor** (**Fall and Summer 2017)**

* Interviewed and hired leaders for the program.
* Organized the schedule for each program and contacted community members and professors to potentially be a part of the program.

**Advancement Via Individual Determination Tutor (Fall 2016)**

* Conducted tutorial sessions in AP Statistics and AP Earth and Environmental Science for scholars at Asheville High School.

**Research Experience for Undergraduates: Earth’s Collaborative Systems** (**Summer 2015)**

* Researched the movement of hurricanes, design of small satellite systems, environmental impacts of fracking, and other basic and applied earth systems and engineering research.

**AWARDS & HONORS**

Leadership.Excellence.Achievement.Partnership Award for Program of the Year (April 2018)

AVID Leadership Scholarship (2016-2018)

Big Brothers Big Sisters of Western North Carolina Big of the Month (September 2017)

North Carolina Scholar (2014)

Michael A. DeMAYO Scholarship Recipient (2014)

The National Beta Club (2013-2014)

West Charlotte National Honor Society (2013-2014)

**LEADERSHIP**

**University of Georgia Geography Department Social Justice Committee (2020-2022)**

* Worked with faculty and students to create programming aimed to increase equity, inclusion, and equality within the department.

**University of North Carolina Asheville Ambassador (2017-June 2018)**

* Greeted visitors to the university and provided tours about the university.

**University of North Carolina Asheville Transportation Committee (2016-May 2018)**

* Reviewed parking appeals and voted on their standing. Contributed to policy created by the committee.

**University of North Carolina Asheville Diversity Council (2016-May 2018)**

* Serve on a committee with faculty and students at the university. Each member works to influence an increase in diversity and inclusion at the university through initiative and deliberate action.

**University of North Carolina Asheville Student Government**

* As a junior senator, I created legislation and participated in the voting on legislation for the university **(2016-2017).**
* As the Executive of Multicultural Affairs in the President’s cabinet, I created programming centered around diversity for the student body and worked closely with Multicultural Affairs to promote diversity and educate the community. **(2017-2018).**

**University of North Carolina Asheville Pre-rendezblue Leader (Summer 2016)**

* I led a group of 12 incoming freshmen through a week of music and arts related activities in and around Asheville, NC.

**University of North Carolina Asheville Orientation Leader (Summer 2016)**

* During each session of UNC Asheville orientation, I assisted incoming freshmen and their parents with navigating campus and receiving information about the university.

**University of North Carolina Asheville Black Student Association**

* As Treasurer, I budgeted the years spending on activities and assisted in executive planning **(2015-2016).**
* As vice-president, I created programming in addition to maintaining written record of the organization's information **(2016-2017).**
* As president, I maintained the university-sanction of the organization, maintained an executive team, and planned events through Multicultural Affairs **(2017-2018).**

**SERVICE**

**NASA DEVELOP Georgia-Athens Alumni Panels**

* Provide career and education advice to emerging scientists and researchers (**March 2021, June 2021**)

**Charlotte Flights Track and Field Club (2014-2018)**

* Mentored youth ages 5-10 to build courage and talent in life and on the athletic field.

**Big Brothers Big Sisters of Western North Carolina (2015-May 2018)**

* Acted as a Big Sister to my little by providing advice, assistance, and support.

**Connections Peer Mentoring Program (Aug 2016-May 2017)**

* Served as a mentor for two freshmen students at UNC Asheville. The main goals included orienting them to campus life and assisting with engaging them in education and community activities.

**COURSEWORK / TRAINING**

**University of North Carolina Ashville (Science):**

Algebra based Physics• Calculus I, II, III • Differential Equations• Meteorological Statistics• Thermodynamics• Physical Climatology• Sociology• Applied Climatology• Environmental Studies

**University of North Carolina Ashville (Other):**

Servant Leadership• Safe Zone

**University of Georgia (Science):**

Hydrometeorology• Groundwater Hydrology • Modeling the Marine Atmosphere • Modeling Earth’s Climate System • Geographic Information Systems • Tropical System Climatology

**NASA DEVELOP:**

Personality Typing (Enneagram, MBTI, NASA 4D)• LP DAAC AppEEARS• Technical Writing• Teambuilding • ArcGIS Pro • Esri Storymaps

**SKILLS**

Research design, development, and implementation• Familiarity with publishing standards• Research proposal writing• Public speaking (general public, conference proceedings, academia)• Technical and scientific writing• Science writing/communication for the general public

**Data analysis**

Time series analysis• Bias calculation• Groundtruthing• Data validation• Data ownership and standards• Parametric statistics• Image processing

**Interpersonal**

Project management• Mentoring• Planning and scheduling• Ability to maintain quality scientific standards• Hiring, supervising, and evaluating interns, students, and scientists• Project collaboration with academic, governmental, industry, and non-profit actors

**Programming/Software Packages/Models:**

Fortran90 *- Novice* • GARP *- Advanced* • ArcGIS *- Novice* • MATLAB *- Intermediate* • Google Earth Engine *- Novice* • Microsoft Office Suite *- Advanced* • WikiText *– Intermediate* • R/RStudio *- Intermediate* • Panoply *– Advanced* • Weather Research & Forecasting Model (WRF) *- Intermediate* • Community Earth System Model (CESM) *- Intermediate* • USGS MODFLOW *- Novice*