Undergraduate Fellowship Opportunity with the Baltimore Neighborhood Indicators Alliance www.bniajfi.org

Summer 2021

Harnessing the Data Revolution: Data Science Corps (NSF funded):

If you are interested in getting conceptual and hands-on experience in data science and get paid for it, consider applying for the following opportunity. The Baltimore Neighborhood Indicators Alliance (BNIA) at the University of Baltimore is seeking Undergraduate students to be a part of a Baltimore regional Data Science Corps. Students will be trained on data processing best practices for analysis, geographic information systems, effective and ethical data visualization techniques for applications that help communities in Baltimore understand the current impacts of the COVID 19 pandemic. The students will work with BNIA staff and faculty mentors and will be involved in real-world projects. For more information about this grant visit https://bniaifi.org/currentprojects/data_science_corps/

What kinds of projects might the students work on?

- 1) Analyze databases regarding internet speeds by neighborhood
- 2) Create a webscraper to collect routinely updated data on websites that don't have an open data api
- 3) Review real time service of new bus schedules and see if different neighborhoods are experiencing service disruptions
- 4) Analyze city budgets for youth related spending and programs

Timeframe and Logistics:

Students who have relevant interest in one or more of the above areas will be selected. This position is from June 1 to August 20, 2021. Students will be introduced to several data science learning opportunities with BNIA staff and other online training in order to work on the projects outlined above.

- Learning modules and team meetings will be approximately 3-5 hours per week.
- Time spent on projects will be approximately 8 hours per week.

Students will be able to work remotely and then onsite as social-distancing protocols are lifted at the University of Baltimore. Students will be provided a digital device if needed; however, access to internet/WiFi will be necessary to work offsite.

Stipend:

\$2,500 for the summer semester. The position is a **paid** opportunity funded by a grant from the National Science Foundation. Extension of paid internship for another semester into the Fall may be possible upon successful completion of summer session.

Eligibility:

To receive the stipend as a Data Science Fellow, you must be:

- A University of Baltimore undergraduate student with a GPA of 3.0 or higher
- A US Citizen or Greencard holder.

Unpaid, volunteer positions may be an option. This experience may qualify as a Merrick School or AITC Internship experience if desired.

Required skills:

- Excel/Access
- Some familiarity with Python (or strong desire to learn)
- Data Cleaning experience: Successfully completion (B+ or higher) of INSS 310/422 or AITC 356/456 would qualify

Preferred skills prior to starting or eagerness to learn one of more quickly:

- GitHub
- GIS- ArcGIS or QGIS
- SPSS
- Tableau, ArcGIS Operations Dashboard, or other data visualization platforms

What skills students will learn:

- Understanding the Census and Census geographies
- Spatial analysis skills, including online GIS
- Descriptive statistics and other statistical measures
- Visualization ethics and best practices
- How data science can be used for social good
- Networking with other data science students in the Baltimore Region

How to Apply:

Please send a resume and cover letter describing experience with "Required" and "Preferred" skills above and what you hope to gain from the experience to Dr. Seema Iyer at siyer@ubalt.edu. Applications by May 15, 2021 will be given top priority.