

Reginald Toure

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Objective

Enthusiastic computer scientist eager to contribute to team success through hard work and attention to detail. Motivated to learn, grow, and excel.

Skills

Software Development | Developing Project Plans | JAVA, R, HTML, CSS, JavaScript | Data Representation | Program Coding

Education

Virginia State University - Petersburg, VA

Bachelor of Science in Computer Science, Expected May 2023

G.P.A.: 3.9/4.0

Activities: Virginia State University Coding Club member; Trojan Gaming Club Vice President

Northern Virginia Community College - Annandale, VA

Associate of Arts in General Studies, Graduated May 2021

Work/ Internship Experience

Coding it Forward Civic Innovation Corps

Mayor's Office of Budget & Innovations -City of Los Angeles, CA

Data Analysis Intern, Mayor's Office of Budget & Innovation, May 2022 - September 2022

Selected from an applicant pool of 1,600 students with a 10% acceptance rate as part of the Civic Innovation Corps, a Coding it Forward fellowship that connects mission-driven technology students to opportunities in local government.

- Analyzed, cleaned, and compiled data on home mortgage applicants in Los Angeles using the Federal Financial Institutions Examinations Council's Home Mortgage Disclose Act data.
- Provided geographic and analytical visualizations of the relationship between race and mortgage denials and disaggregated by reasons for application and rejection to better understand racial equity in the city.
- Responsible for producing data analyses, dashboards, and apps that provide insights to city leaders and civilians.

Mozilla Foundation HBCU Collaborative Curriculum Program

College of Engineering & Technology, Virginia State University - Petersburg, VA

Work Study Intern, May 2021- December 2021

Received direct mentoring from Mozilla experts for learning modern software engineering practices that balance ethical considerations. Developed collaboration skills in software design and development, programming, user experience, product testing, designing for accessibility, and prototyping.

- Developed an extension for the Mozilla Firefox browser.
- Used HTML and JavaScript to create a social media extension using the Twitter and Facebook APIs.

Data Science for the Public Good Program

University of Virginia Biocomplexity Institute - Charlottesville, VA

Computer Science Intern, June 2020 - September 2020; June 2021- September 2021

As a member of small, transdisciplinary teams, conducted research at the intersection of statistics, computation, and the social sciences for public sector stakeholders.

Research Experience

"Equity in Access to Parks in Chesterfield County, VA."

Planners in the Chesterfield Department of Parks and Recreation (DPR) needed a way to measure equity in access to their facilities as the population increases, becomes more diverse, and ages. We used DPR's GeoSpace resources to obtain detailed location and facilities' amenities data for their parks. A rudimentary "quality score" was developed by ranking each park's qualities based on quality and type of amenities. Our literature search determined that analyzing

vulnerable population demographics would yield the best variables for research on equity. We used the US Census's 5-Year American Community Surveys and GeoSpace information to determine the quantity of vulnerable population demographics on a census tract level. We then estimated the number of people of these groups living closest to the parks in their census areas. My specific role:

- Managed the project: assigned tasks, managed workflow, reviewed deliverables, liaised with lead professors
- Gathered resources on park amenities - - combined and overlaid with demographics to identify disparities in race, incomes, etc.
- Used US Census API Key and R Studio to pull more disaggregated data for deeper analysis
- Led presentation of process and findings at the final Symposium with academics, government, and industry present
- Honed skills in coding and data visualization

“Availability of Services: Evolving Demographics, Housing and Traffic in Rappahannock County”

We used publicly available data from the American Community Survey (ACS) to explore questions and concerns held by stakeholders in Rappahannock County, Virginia. We created a county profile for Rappahannock that displays information about age, race, income, employment, housing prices, and more. We analyzed traffic volume data from the Virginia Department of Transportation to identify areas of increased or decreased traffic in the last ten years (2010-2020). Finally, we aggregated community services and resources into a single dashboard that allows us to visualize the availability of services to residents of the county. Using the county profile, traffic volume data, and the service data, we are able to provide data-driven descriptions of service provision in Rappahannock County, Virginia during the last decade. My responsibilities/skills:

- Pulled data on age, incomes, housing, race, education attainment from US Census Bureau databases
- Created maps and graphs using R Studio
- Contributed to the digital poster session
- Skills Strengthened: R Studio, coding, data visualizations, teamwork

“Factors Contributing to Health Care Inequities in Petersburg, VA.”

Petersburg, VA consistently ranks at or near the bottom of the County Health Rankings for the Commonwealth of Virginia. We provided data analysis for the Petersburg Wellness of Consortium (PWC), a collaboration of local stakeholders focused on improving health outcomes. The research explored how disparities in income and access to food, health care, and healthy lifestyle options may relate to the health outcomes observed in Petersburg. My specific responsibilities/skills:

- Researched and collected location data on medical facilities, EBT accepting stores, gyms, and bus routes
- Used QGIS mapping software to visually connect facilities with demographic data collected
- Prepared data visualization for poster session
- Led presentation of results to PWC and symposium attendees

“Demonstrating the Value of the Appomattox River Trail.”

FOLAR, a local non-profit organization needed data to make the case for development of a 25-mile trail system along the Appomattox River for walking and biking. We explored a range of data and made the case for developing the local walking and biking infrastructure in terms of economics, transportation, and health outcomes. My responsibilities/skills:

- Collected location data for existing parks and trails near the 25-mile route being contemplated
- Collected location data for businesses near the 25-mile route
- Prepared visuals based on the data
- Presented results at final symposium and successfully fielded questions on methodology, etc.