Civic Digital Fellowship

US Census Bureau & Internal Revenue Service

Note: this job description and its details are tentative and subject to change without notice

<u>Visit the website</u> and <u>fill out this interest form</u> for the latest updates about the Civic Digital Fellowship.

About

The Civic Data Fellowship is the product of a collaboration between <u>Coding it Forward</u>, the <u>Harvard Open Data Project</u>, and former US Deputy CTO and Harvard professor Nick Sinai, with the US Census Bureau and Internal Revenue Service.

Coding it Forward is dedicated to inspiring and empowering people to use their technology skills for social good. We are excited to be collaborating with the Census Bureau and IRS to launch an elite public-sector summer fellowship program for college students interested in data science, technology, and data journalism (think FiveThirtyEight). A cohort of selected students will spend the summer in Washington, D.C. working with federal agencies on new technology and data science projects.

The Civic Digital Fellowship is the first of its kind on the federal level and is a great opportunity for students passionate about the intersection of technology and public service. This fellowship is targeted to students with both technical and non-technical skills. We are looking for:

- Data Scientists/Software Developers
- Product Managers
- Data Journalists

Host Agencies and Example Projects

The United States Census Bureau's mission is to serve as the leading source of quality data about the nation's people and economy. The Internal Revenue Service is the executive agency responsible for national tax collection and enforcement of related laws. Both agencies have significant demand for modern technological solutions in the data that they collect.

The Civic Digital Fellowship is dedicated to providing fellows a **dedicated mentor** inside the agency they are assigned to. At the end of the summer, fellows may have the opportunity to showcase their work at a **demo day at the White House**.

Similar projects to what fellows can be expected to work on include the <u>Census CitySDK</u> effort or the <u>Department of Commerce Data Usability Project</u>. The Census CitySDK, which provides an API to streamline the use of Census datasets, was developed in a collaborative effort between numerous federal agencies to foster civic innovation by third-party groups and facilitate the development of open data applications. The Commerce Data Usability Project is dedicated to showcasing the potential of the Commerce Department's tens of thousands of free and open datasets.

CitySDK was created in twelve weeks, the proposed length of the fellowship, and is therefore a good example of a potential project for Civic Digital Fellows.

Open Positions

Data Scientist/Software Engineer

Data science and software engineering fellows will work with host agencies' tens of thousands of large datasets, developing apps from the ground up and deploying them at scale. Fellows will use modern data analysis and visualization tools in languages including Python, R, and JavaScript.

Projects will depend on agencies' needs and fellows' skill sets. Example projects include:

- Big Data Develop modules and examples using Python to make data easier to use in big data applications.
- Visualization Develop visualization examples using D3 and other libraries, increasing the ability of the CitySDK product to help journalists create visual stories with data.
- Smart Cities Develop smart city and Internet of things integrations with CitySDK, including a proof of concept that solves a need identified by a city and industry partner.

Applicants should be familiar with data analysis, data visualization, and mobile/web development, and they should be comfortable with Python, R, or JavaScript. Applicants should submit a link to a data science, data visualization, app, or web development project they have worked on.

Product Manager

Product Manager fellows will work with data scientists, software engineers, and data scientists to design, develop, and deploy products for their host agencies. They will work with leaders at the host agencies to identify opportunities to increase citizen engagement and modernize the agencies using available datasets. Then they will lead their team of fellows to release and iterate on a minimum viable product during the summer.

Applicants should be skilled in human-centered design, UI/UX design, agile development, and working with teams. They should be able to communicate between technical and non-technical people, set realistic goals and deadlines, and empathize with users. Comfort with programming languages including Python, R, or JavaScript is recommended but not required.

Data Journalist

Data journalist fellows will be tasked with writing engaging, data-driven articles and developing other materials to showcase the broad variety and potential of the host agency's data. The data journalist fellow will work closely with mentors within the agency to produce content for wide distribution. They can draw inspiration from FiveThirtyEight, which blended political reporting with data analysis to create engaging articles, podcasts, and data visualizations.

Applicants interested in this position should submit a writing sample involving the analysis of quantitative data. They should have the knowledge and skills necessary to report on data, statistics, and other quantitative analyses in an engaging and accessible style.

Fellowship Logistics:

The Civic Data Fellowship will offer **full-time**, **ten-to-twelve week summer internship positions based in Washington**, **D.C**. We expect to send a cohort of students to each host agency.

At this time, we expect that **host agencies will compensate fellows with a summer stipend or hourly wage.** Relocation assistance will not be provided. To supplement agency funding, applicants are also encouraged to apply for outside funding provided by their home universities.

How to Apply:

As noted above, the Civic Digital Fellowship has not officially launched, but we hope to offer fellowships for summer 2017. To get updates about this opportunity, **fill out this interest form** and we will let you know if this fellowship becomes a reality.

If you have questions about this opportunity, please contact Neel Mehta at neelmehta@college.harvard.edu.