Data Analyst
JOB OPENING ID 326553

JOB DESCRIPTION
IPUMS is the world’s largest collection of individual-level census and survey data, freely available to researchers worldwide at ipums.org. We seek smart, technically-minded people who enjoy working with data to join the IPUMS team.

We are hiring a data analyst to join the team of researchers and technical staff developing our full-count historical U.S. census database. With hundreds of millions of records documenting every American from 1850 to 1940, the database is an unprecedented resource for social research, but it poses a host of challenges. The data are beyond the scale social scientists normally encounter, and they require different and sometimes novel approaches to process, diagnose, and edit. These data will support an innovative record linkage project to trace individuals from census to census, illuminating long-term patterns of U.S. geographic and social mobility.

The hallmark of all IPUMS projects is the integration of discrete datasets into a single consistently coded and documented series enabling comparative analyses over time or space. The suite of IPUMS census and survey data projects is publicly available at no cost at ipums.org. The data from the historical census project will be accessed through the IPUMS-USA dissemination system.

IPUMS is part of the Institute for Social Research and Data Innovation, which includes the Minnesota Population Center. The Institute environment is highly collaborative, and you will work closely with research scientists, data analysts, graduate research assistants, and software developers. The Institute supports the work-life balance of our staff with 40 hour work weeks and flexible work hours. The University also offers excellent health insurance and tuition assistance. IPUMS has a robust professional development fund for staff training and development.

Diversity and inclusion is a core value of our organization. We aspire to create a team that represents the diversity of our city, our region, and our world, and to create a space that encourages and embraces inclusiveness, equal opportunity, and respect. We strongly encourage women and members of under-represented groups to apply.

RESPONSIBILITIES
For this position, we seek someone with a strong data-driven social science background who enjoys the technical aspects of data work. The census data need to be cleaned, new data merged in, editing routines developed, and millions of strings coded into useful classifications. The data are far too large for manual
inspection, requiring efficient data analysis and scalable approaches including machine learning. The analyst will support the project lead and other research staff in these tasks. Responsibilities will include analyzing the data for errors and inconsistencies and developing routines to manipulate, subset and link the data in a variety of ways. The analyst will work closely with the lead software developer and interact with other members of the IPUMS IT team.

The candidate should have experience not only with data analysis in a statistical package but with higher level data manipulation features of R or with Python. Most importantly, they need a willingness to learn new things and work as part of a team. We are constantly pushing the boundaries of data processing and dissemination methods, and there is considerable opportunity for initiative and creativity by researchers at all levels.

We have funding for the position for two years, but an extension beyond that period may prove possible.

QUALIFICATIONS
Required Qualifications: A bachelor’s degree in a social science field and two years of relevant experience or a combination of education and work experience to equal six years. Excellent computer skills and experience analyzing census or survey microdata in a statistical package such as SPSS, Stata, SAS, or R. Data manipulation/editing experience with Python or R. Strong written, verbal and interpersonal communication skills with audiences from various communities and cultures.

Additional selection criteria include: Familiarity with databases and SQL. Experience analyzing one of the IPUMS databases; demonstrated ability to work independently and as a member of a diverse team; a record of learning new information technology as required.

APPLICATION PROCEDURE
Please apply using the University of Minnesota’s online employment system humanresources.umn.edu/jobs and search job opening ID 326553. Application requirements include a resume, and a cover letter describing your interest and qualifications in the position. Questions concerning the application process may be addressed to Mia Riza, HR Generalist, at mpc-jobs@umn.edu.

Any offer of employment is contingent upon the successful completion of a background check. Our presumption is that prospective employees are eligible to work here. Criminal convictions do not automatically disqualify finalists from employment.