



THE UNIVERSITY OF CHICAGO

DATA SCIENCE INSTITUTE

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Research Assistant | Internet Equity Initiative

The [Internet Equity research initiative](#) at the Data Science Institute (DSI) is looking to hire a part-time research assistant (RA) for a network performance project in collaboration with the [Chicago Area Broadband Initiative](#) (CABI). The RA will help our team evaluate CABI's wireless community network testbed at the [Overton Incubator](#) and develop a network health dashboard. The network consists of a point-to-point 60 GHz radio and a few WiFi access points. Our goal is to understand the performance of different network components by analyzing data collected from multiple vantage points.

The ideal candidate would have an interest in developing innovative solutions to bridge the digital divide in urban communities. This position would be for Summer 2022 and based at the University of Chicago.

RESPONSIBILITIES

- Develop a data collection pipeline that combines data from multiple vantage points, including the 60 GHz radios and WiFi access points.
- Analyze the combined data to identify performance bottlenecks
- Create visualizations of the network data to help the community partner assess network performance
- Communicate with community partners and report insights to the partner organization.
- Attend weekly team meetings and regular check-in meetings with community partners.

TIME COMMITMENT

- Project dates: June 13th - August 20th, 2022
- Work hours can be flexible, and some tasks can be completed remotely. Estimated 15-20 hours/week.

REQUIRED SKILLS

- Intermediate knowledge of Python
- Organizational, interpersonal, and community-building skills
- Ability to commute off-campus to meet with community partners (A personal vehicle is not required.)

PREFERRED SKILLS

- Basic knowledge of computer networking
- Javascript for basic web visualization
- Experience working with a database management system like SQL

HOURLY RATE: \$16-18/hr for undergraduate RAs and \$20-25/hr for graduate RAs

START DATE: As soon as possible, ideally before June 13, 2022.

TO APPLY: Send a resume/CV and a one page cover letter explaining your background and interests in the position to Tarun Mangla (tmangla@uchicago.edu).