

**Summer Graduate Research Student Assistant
College of Built Environments, University of Washington**

National Analysis of Rental Markets Using Scraped Online Data

We are seeking two summer graduate research student assistants (GRSAs) for the 2020 Summer Quarter. The GRSAs will assist with research on an emergent effort to collect data by scraping rental listings from online platforms in order to analyze rental markets. This is part of a broader research agenda with possible extension through the next two academic years if funding is available.

Duration: June 16, 2020 through September 15, 2020

Hours: Flexible

Supervision: Rebecca Walter and Arthur Acolin, College of Built Environments

Compensation: Summer GRSA's hourly wage in accordance with UW Graduate School policy depending on student academic levels: (<https://grad.uw.edu/graduate-student-funding/funding-information-for-departments/administering-assistantships/ta-ra-salaries/>)

Description:

The project is part of an effort to create and use a programming by demonstration tool that can be used to collect publicly available information online and create an Open Knowledge Network (OKN). The GRSAs will play a key role in the project, working with a multidisciplinary team of faculty members and research assistants to expand data collection efforts by creating and improving existing scrapers, contributing to postprocessing of collected data, and improving the database structure. The GRSAs will also have the opportunity to work on data visualization and be involved in academic papers. Tasks may include but are not limited to:

- Create or update existing scrapers used to collect rental listing from online rental platforms using the Helena programming by demonstration tool;
- Improve post-processing workflow and steps to process raw data into cleaned records with standardized fields and geolocation information;
- Create or update database to store collected data and improve non-programmers ability to extract data for specific projects;
- Create visualization and dashboard to display processed data for non-technical community users interested in the data;
- Assist in the development of the literature review and framing of academic papers;
- Prepare and process data to conduct analyses for academic research papers.

Qualifications: Candidates should demonstrate the following:

- Strong data processing and analytical skills and experience using statistical software packages (R or Stata) and ability to work with databases (sql, postgres) (required)
- Some knowledge of programming languages (recommended)

Ideal candidates will have research interests in housing markets and housing search processes. Applicants must be currently enrolled in a graduate program at the University of Washington Seattle campus. Interested applicants should submit the following:

- A resume/CV
- 1-page statement outlining the candidate's qualifications for and interest in the position
- Names and contact information for 2 references

Applications should be submitted by May 27, 2020 at 11:59 PM to Arthur Acolin acolin@uw.edu and Rebecca Walter rjwalter@uw.edu. Note: Graduate students that are enrolled in at least two credits over the summer will be appointed as a salaried research assistant.