

ECONOMICS UNDERGRADUATE RESEARCH INTERNSHIPS



Hours & Rate: 10 hours/week @ \$15/hour

Project: Instructional Staff Employment in Higher Education

Faculty Mentor: Dr. Steven Shulman

Description: The research assistant works for the Center for the Study of Academic Labor (CSAL) to produce higher education employment reports and other reports. The intern will work with IPEDS data to create summary tables showing instructional staff employment at every college and university in the U.S. Note: this position is 5 hours per week.

Essential skills: Spreadsheets, data management, written communication; completion of ECON 235 is required.

<u>Project: Regional Economics Development Institute (REDI) – Developing Novel Digital</u> <u>Dashboards for Rural Colorado</u>

Faculty Mentor: Dr. Stephan Weiler

Description: The research project will continue an ongoing REDI@CSU effort to develop a digital dashboard for Colorado counties, focusing on measures of entrepreneurship, socioeconomic conditions, and economic growth. The student will work with both the mentor and REDI@CSU graduate research assistants to brainstorm, develop, and distribute these metrics, particularly to rural counties which face steep informational asymmetries regarding their economic viabilities. The student will help create literature reviews in support of the metrics, work with secondary data, and communicate both metrics and analytical findings to key constituencies.

Essential skills: Spreadsheets, data management, statistics/econometrics, written communication, internet search skills; knowledge of Python, R, or STATA would be welcome but is not required. Preference given to candidates who are familiar with REDI.

Project: State Demography Office/Department of Local Affairs

Faculty Mentor: Dr. Stephan Weiler

Description: This position will provide a hands-on opportunity to work with the Department of Local Affairs and the State Demography Office to gain experience with forecasting, data preparation and dissemination, and the opportunity to work with Local Governments to help them ground truth and learn more about their local economic and demographic conditions and how they're expected to change over the next few decades. Note: Work can be done remotely or on site at the CO Dept. of Local Affairs office in Denver (preferably on Tues / Weds).

Essential skills: Spreadsheets, data management, statistics/econometrics, written communication, internet search skills; knowledge of R and Eviews forecasting software is a plus.

Project: Literature Review of Mangrove Loss

Faculty Mentor: Dr. Edward Barbier

Description: This internship will (a) conduct a literature review of the economic causes and consequences of mangrove loss globally, (b) review literature of cross-country economic studies of deforestation to identify key statistical methods used, c) identify and collect the data from 1990 to 2019 by country of mangrove area, including restored areas, for the major mangrove countries, and d) conduct preliminary statistical analysis, if possible, of key economic factors causing mangrove loss, from 1990 to 2019.

Essential Skills: Spreadsheets, data management, statistics/econometrics, written communication, internet search skills

Project: Economic Vulnerability to Sea-Level Rise

Faculty Mentor: Dr. Martin Shields

Description: Sea-level rise poses significant economic threats to US coastal communities. In this effort we will try to quantify the potential economic impacts of sea-level rise in the US, focusing on poorer communities. To do so, the intern will 1) identify and summarize literature related to the economic impacts of sea-level rise in the US, and 2) collect and examine existing spatially-detailed databases of economic and social characteristics of threatened communities.

Essential skills: Spreadsheets, data management, statistics/econometrics, written communication, internet search skills; GIS is a plus; ideal candidate is self-starting and interested in understanding how sea-level rise may impact vulnerable populations

Project: CORE Study Research Assistant

Faculty Mentor: Dr. Anders Fremstad

Description: Prof. Fremstad and two graduate students are studying impact of adopting CORE's open textbook in our Principles of Economics courses. The study makes use of anonymous administrative and survey data to estimate the effect of the curricular change on students' interest and success in economics. The successful applicant will work with Prof. Fremstad to determine what tasks would be the best fit based on skill levels and may assist the team with things such as administering surveys, organizing/cleaning data, analyzing data, and reviewing the literature.

Essential skills: Spreadsheets, data management, written communication; familiarity with STATA is a strong plus; ideal candidate is an organized, self-motivated student employee who is able to work independently and seek assistance when necessary

Project: Poverty Action Center in the Regional Economic Development Institute (PAC@REDI)

Faculty Mentor: Dr. Anita Alves Pena

Description: The research assistantship will work with faculty from PAC@REDI to continue examination of the intersections between economic outcomes and water/sanitation/hygiene access by various demographic and social groups using secondary data from developing

countries. The student assistant will assist with literature reviews, work with secondary data, and communicate findings with a team of faculty and graduate students.

Essential skills: Spreadsheets, data management, statistics/econometrics, written communication, internet search skills; knowledge of R or STATA or similar would be welcome but is not required.

Project: Solar and Agriculture Economic Analyst

Faculty Mentor: Dr. Stephan Weiler

Professional Supervisor: Jordan Macknick, National Renewable Energy Laboratory

Description: This position will evaluate economic tradeoffs of traditional and innovative solar photovoltaic (PV) development practices that can be integrated with agriculture. Combining solar PV and agriculture (often termed Agrivoltaics), has the potential to lead to mutual economic and ecological benefits to landowners and solar developers. Research and analysis is needed to further quantify economic tradeoffs of different PV designs interacting with different agricultural activities. This position will summarize existing literature and integrate data from ongoing studies to provide a more comprehensive assessment of the economic value of Agrivoltaic configurations.

Essentials skills: Spreadsheets, data management, written communication, statistics/econometrics, internet search skills; cost/benefit analysis experience, ability to conduct literature reviews, ability to organize large volumes of different types of data, experience in statistical software packages a plus, familiarity with PV system designs and/or agricultural activities a plus.