

Randall Lewis Data Science Fellowship

Open data, big data, the internet of things, analytics, and automation have the capacity to completely change the nature of our communities over the coming years. In order to improve their decision making and provision of services, governments of all sizes will need to respond to these rapid advancements in technology by changing the way they collect, distribute, and interact with data.

As a regional thought leader and technical assistance provider, the Southern California Association of Governments (SCAG) is uniquely poised to collaborate with and provide guidance to its members and stakeholders on these issues.

Through a generous contribution by Randall Lewis, SCAG will be hosting data science students from regional universities to support a new region wide initiative around open and big data in the coming years. Fellows selected will play an important role in supporting governments across the region to become more data driven and effective in the provision of their services.

Goals of the Fellowship:

Fellows from local universities will work with SCAG project managers to undertake a variety of data analysis and application development tasks to achieve the following:

- Support regional planning and modeling work related to the Regional Transportation Plan and Sustainable Communities Strategy
- Support SCAG in developing and implementing a Smart Region Framework
- Support data sharing and data collection projects across the region that support data needs of local jurisdictions
- Provide policy guidance and analysis related to innovative technologies (such as automated vehicles, internet of things, etc.)

Example Projects:

- Develop story maps that explain how the internet of things can improve government services
- Develop GIS applications and support data curation to support SCAG's Open Data Portal
- Develop data dashboards to support regional planning activities
- Support API development and big data projects

Position Background:

Under general supervision, the fellow will perform a variety of research and technical duties. Positions will range from 15-25 hours per week. Fellows will be appointed to one of the following areas: Planning, GIS and Modeling, or IT and Application Development. Fellows will receive training and mentoring while working on real world projects that help improve data driven decision making across the region. Fellows are expected to begin the fall of 2017 and participate through summer 2018.

Duties:

- Perform a wide variety of research and technical assignments to assist departments or sections and to receive on-the-job exposure to various government issues; depending on assigned work area, learn to perform various administrative, planning, analytical, and financial tasks.
- Research, write, and present reports and recommendations on a variety of government topics; participate in conducting studies and analyses involving assigned programs and functions concerning policies, practices, procedures, financial resources, facilities, proposals, staffing, new programs and projects, effectiveness of programs, and planning.
- Collect, compile, describe, organize, analyze, interpret, and present data and information related to area and issues under study.
- Assist in the coordination of data and materials for the department or section; consult with businesses, citizens, SCAG personnel, consultants, governmental agencies, and associations to obtain and distribute information and data.
- Perform a variety of programming and application development tasks to showcase SCAG data related projects including story maps, data dashboards, mobile application development, GIS analysis projects, etc.

Qualifications:

SCAG is looking for data scientists with multi-sectoral backgrounds that can bring a passion for improving government to their work. Applicants should currently be enrolled in or have recently graduated from a graduate level degree program in Urban Planning, Data Science, Geography, Information Technology or a related field. Ideal applicants will have some or a combination a few of the following skills:

- Understanding of urban planning policy areas (transportation, health, water, energy, land use, climate change, etc.)
- Geographic Information Systems (ArcMap, PostGIS, Open Street Map, etc.)
- Programming and Data Analysis (Python, R, SQL, SAS, PostgreSQL, etc.)
- Experience developing visualization tools (ArcGIS Online, Microsoft Power BI, Tableau, Etc.)
- Excellent communication and presentation skills

To Apply:

The 2017 fellowship will be administered by Partners for Better Health. Interested applicants can apply using the Application for the Randal Lewis Health Policy Fellowship. Details on the application process can be found here: <http://p4bhealth.org/get-involved/>. For any questions, please contact Maggie Hawkins (mhawkins@p4bhealth.ORG) or Rye Baerg (baerg@scag.ca.gov).