

UC SAN DIEGO PROFESSOR STEVEN DOW AWARDED NATIONAL SCIENCE FOUNDATION GRANT

\$500,000 IN RESEARCH FUNDING



Pictured: Professor Steven Dow

San Diego, California, July 1, 2020--

Steven Dow of the UC San Diego Cognitive Science Department and Design Lab has been awarded a National Science Foundation (NSF) grant of \$500,000 to pursue his research proposal, with Postdoctoral researchers Brian McInnis and Steve MacNeil.

The abstract is listed below:

2009003 CHS: Small: Scaffolding Data-Centered Interactions in Online Civic Discussions

This project seeks to increase the level of evidence-based discussion at news websites by creating scaffolding that supports data-literate contributions and by adopting concepts from crowdsourcing such as micro-task workflows, incentives, and quality control. The research vision is twofold:

- 1. To help individuals form a deeper understanding of a civic issue so that their contributions are more valuable
- 2. To layer these contributions back into the original news article so that the narrative and data presentation continually improve for people just entering the discussion.

Communities everywhere grapple with civic issues, such as housing, mobility, and climate change. Online discussion systems offer a unique opportunity for diverse audiences to collaboratively build insights around a civic issue, but these systems rarely reach their potential. At best, online discussions give people a chance to express opinions, but all too often they become breeding grounds for trolling, misinformation, and conspiracies. The volume of comments can overwhelm moderators, making it difficult to highlight well-reasoned insights that can advance a community. This research aims to advance technologies that scaffold data-centered contributions in order to help communities interact constructively around evidence.

The research will:

- 1. Characterize the current state of data-centered discussion by analyzing the past ten years of online commenting on three popular news websites
- 2. Develop and compare scaffolding techniques based on data literacy education that would orient people to offer data-centered observations, critiques, and improvements
- 3. Conduct controlled experiments to evaluate how these scaffolds affect personal outcomes like comprehension and data literacy, discussion behavior such as reciprocity, and community outcomes including polarization
- 4. Develop and evaluate novel online discussion technology through real-world deployments in a projectbased classroom focused on climate change and as part of a civic design competition.

All research products - including data sets, analysis methods, and source code - will be made available to other researchers exploring online discourse, data science, visualization, and civic design.

From: Francine Busby Subject: Congratulations on your grant! Date: July 2, 2020 at 11:13:43 AM PDT To: Steven Dow

Dear Dr. Dow,

On behalf of Congressman Mike Levin, I want to congratulate you on your grant award. We have been notified by the National Science Foundation that the Division of Information and Intelligent Systems awarded a grant in the amount of \$499,373.00 for your research project titled "Scaffolding Data-Centered Interactions in Online Civil Discussions".

While we don't understand all the details of the science and mathematics, we do know that your work is very important and will have an impact on many lives. We also appreciate the contributions that you are making to our vibrant regional research community and to our local economy.

Rep. Levin understands and values the scope and quality of the research being done by you and your colleagues in our region. I'm also glad to share that Rep. Levin has signed an appropriations letter requesting \$44.7 billion for NIH, a \$3 billion increase.

We wish you great success,

Francine Busby District Director U.S. Congressman Mike Levin (CA-49) 760-599-5000 2204 El Camino Real, suite 314 Oceanside, CA 92054



