Research Experiences for High School Students – 2016 Project Description

Project Title: Science Communications Writer Intern

1. Overall Research Project

We seek high school students with interests in basic journalism and science writing in particular, and the desire to learn more about communicating key messages through both traditional communication methods and social media methods. As a result of this internship, students will gain a better understanding of computational science is achieved, but more importantly be challenged with reducing the technical jargon and other barriers to understanding foundational elements how high-performance computing and data storage aid today’s researchers.

This internship will include assembling short videos of key SDSC researchers based on existing profiles, as well as writing how SDSC resources, including the Center’s Comet and Gordon supercomputers, assist other both SDSC and non-SDSC researchers achieve scientific results. One goal is to take the mystery out of supercomputers for a more general, or less technical, audience.

We anticipate that this ‘Science Writing and Communication’ track may encourage some students to consider careers in computational sciences, which remains one of the more lucrative careers in overall journalism, as technical writing remains a sought-after skill.

Research Project Background

Science Writing and Communications: Highlighting SDSC’s Expertise

1. The National Science Foundation is urging researchers and science writers alike to write at a more basic level of understanding. This from an email dated January 23, 2015:

National Science Foundation Director France Córdova recently announced important new steps to enhance transparency and accountability at NSF. Under the new directive, principal investigators will work with program officers to draft an award abstract in plain English that describes the project and how it will advance the progress of science, the national defense, or the nation’s health, prosperity and welfare. The move comes amid intense scrutiny from Capitol Hill about the value of research in the social sciences and on climate issues. House Science Committee Chairman Lamar Smith and Sen. Rand Paul (R-KY) - a candidate for his party's presidential nomination in 2016 - recently penned a Politico op-Ed on the subject.

2. Number of Students to be supported: 2

3. Name of lead person: Jan Zverina, Division Director of External Relations, San Diego Supercomputer Center, UC San Diego

4. Plan to Integrate Student into Group Activity: Jan Zverina will supervise students directly, help them to develop questions and brief videos for SDSC staff,
and create a variety of media to articulate the basics of supercomputing expertise in a clear and compelling way to both the general public and their student peers. Students will participate in the poster session at the end of the internship, and are free to be as creative as they want in their presentation. For each project, an initial meeting will be used to outline the basics, with review and editing done both via email and through regularly scheduled in-person meetings. Interns will receive constructive criticism of their work, with constructive suggestions for how it might be improved. Completed articles or videos may appear on the SDSC website, or in SDSC’s ‘Innovate’ e-newsletter, with full credit given to students for their work so they may include it in their portfolios. Students may also be invited to report on the SDSC 2016 Big Data Summer Institute in August if they are interested and their schedule allows.

5. **Student Prerequisite:**
   Required prerequisites:
   Evidence of ability to write at least at a 10th grade level (A or B grades in 10th grade English)
   A or B in at least one science or engineering course at the high school level.
   The ability to receive constructive criticism of their writing with grace and humor, and to make revisions guided by professional communication staffers. Students will need to be comfortable in interviewing researchers, primarily in person. Mentors will always provide an introduction.

6. **Number of hours per week:** 10-15 hours.

7. **Relevant link:** San Diego Supercomputer Center: [http://www.sdsc.edu/](http://www.sdsc.edu/) Click on ‘News Releases’ in particular.