

From: [Liu, Yi-Kai \(Fed\)](#)
To: [Orr, Lochi M. Mrs. \(Fed\)](#)
Subject: Re: Project Summaries for Division Yearly -- Your input needed by Dec 21
Date: Friday, December 21, 2018 2:36:22 PM
Attachments: [pqc-summary-2018-final2.docx](#)
[ykliu-summaries-2018.docx](#)

Hi Lochi,

Here are my project summaries for the annual report. There are two files: one is for my own research projects, and one is for the PQC project (which is joint with the computer security division).

Thanks, and happy holidays!

--Yi-Kai

From: Ronald Boisvert <ronald.boisvert@nist.gov>
Sent: Tuesday, November 27, 2018 5:38 PM
To: Division 771
Subject: Project Summaries for Division Yearly -- Your input needed by Dec 21

PLEASE READ THIS ENTIRE MESSAGE.

Your help is needed to complete the second stage of compiling our Division Yearly Report: Project Summaries. These are brief synopses (e.g., 1/2 to 1 page) of projects active during the past year. They are, essentially, extended abstracts suitable for digestion by the broad scientific community.

THIS IS IMPORTANT ... ALL ACTIVE PROJECTS SHOULD HAVE A SUMMARY.
THIS INCLUDES WORK OF POSTDOCS, FACULTY AND ASSOCIATES.

It is OK (even preferable) to combine several related projects with a common theme into a single project summary that can provide a bigger picture of the overall effort. If the project is a joint project, then get together with your collaborators and submit just ONE report. (We can't publish two different descriptions of the same work.) Please list all contributors as co-authors, including those in other NIST Labs and external to NIST.

In your write up, try to answer these questions:

Why are you doing it? Who benefits?
What was accomplished in the last 18 months?
What are the next steps?

Aim your writeup at a scientist who is from another (sub)field. Don't assume the reader knows anything about your specific topic area.

Please include references to papers submitted or published in the last 18 months. And, provide a link if you have a project web page.

Your summary should be at least a half-page in length (using 10 pt Times Roman font), and can be 2 pages or more if you are describing a body of work. Graphics of any kind are especially welcome.

If you are planning to edit last year's summary to create this year's, then please start with the PUBLISHED version (see link below) rather than the version you originally submitted. I edit every one of these, and I seem to be making the same editorial changes over again year-after-year.

I attach some good examples of project summaries from the past. The summaries submitted last year are all contained in the Division's yearly report: <https://doi.org/10.6028/NIST.IR.8208>

PLEASE SUBMIT YOUR REPORTS TO Lochi.Orr@nist.gov BY
**** Friday DEC 21 ****

Submit as either Word file (preferred) or ASCII text. It's OK to include equations; if you submit ASCII insert the equations as LaTeX and we'll reformat them for Word. (If you would rather submit LaTeX, submit both the .tex file and a formatted .pdf file so that we can make sure we do the conversion correctly.)

When submitting, please suggest which of the following categories your project summary applies to:

Mathematics of Metrology
High Performance Computing and Visualization
Advanced Materials
Quantum Information
Foundations of Measurement Science for Information Systems
Mathematical Knowledge Management

I am also looking for project descriptions which could be expanded upon to produce a FEATURE, i.e. a particularly notable advance which could be highlighted in a 2-4 page article. If you have published a notable paper this year please consider doing a feature. I will need 4-6 of these. (You don't need to do a project summary if you do a feature on the same topic.)

Please contact me if you have an idea for a feature. These are formatted differently and have different requirements.

Thanks for your help in producing this! The result is an impressive accounting of the great work of ACMD that helps justify our ability to continue to do it.

Ron