ICS Department Workload Documentation Procedure
Approved by faculty: February 18, 2011
http://goo.gl/IGRrr

1. Motivation

We, the ICS faculty, feel a responsibility to the University of Hawaii and the wider state community to provide an understanding of how we spend our time and the contributions we are making. We developed this workload documentation procedure with the goal of providing ample justification for the support we receive from the people of Hawaii without creating record-keeping overhead that would detract from our productivity.

Our workload documentation procedure is intended to be compatible with the University of Hawai‘i Board of Regents policy, which specifies that Mānoa faculty normally teach 3 courses (9 credits) per semester, or a total of 6 courses (18 credits) per academic year. According to the policy, reductions from that teaching load are granted in recognition of scholarly activity other than teaching. The most important of these activities is scholarly research and publication. The ICS Department Workload Procedure provides evidence to justify our teaching workload reduction to four courses per year. It is also intended to be compatible with Article IV of the UPHA contract, which states that faculty workload should be developed within the context of the college mission and unit, division, or department objectives.

We base our workload documentation on the assumption of a 40-hour work week even though many of our faculty willingly work more than this amount. We feel strongly that number of hours worked is an extremely poor metric with which to evaluate and/or rank faculty. Therefore, our approach is to “cap” each faculty member’s documented workload at 40 hours a week, as this is sufficient to fulfill the goal of providing evidence of appropriate faculty effort to the UH administration and the wider community.

Our procedure is to document our workload once a year, in January, during which time we will document our activities during the preceding twelve months (i.e. the preceding calendar year). Given that research products generally take longer than a semester to produce, we believe that yearly documentation provides the best balance between timeliness and completeness.

Our procedure takes into account that some faculty will be more involved in one aspect than another of our three main missions: education, research and service. However, we expect that all ICS faculty will devote significant effort to all three of these missions.

Our procedure produces metrics that are quantifiable and that are understandable to the outside world. We are not interested in minutiae; there are many tasks that may cumulatively take up a large amount of time, but are expected as part of our profession in support of the three primary missions. We believe it is better to assign a single value (or two) to a particular activity when possible, rather than to get into excessive negotiations over relative worth of different activities by different professors who may differ in their perspectives on time invested. We acknowledge that individuals make significant contributions that do not fall within the general categories listed below, and these contributions can be credited towards the workload (with explanation). We assume that these workload documentation will be publicly available to all members of the
department as well as to the public; they are not personal documents.

2. Workload categories and standard hourly allocations

In the following section, we present a description of how workload can be documented in a standard manner for our three primary activities: teaching, research and service. To achieve this, we provide “standard hourly allocations” for various common activities such as publishing papers, teaching courses, and serving on committees. Obviously, the actual amount of time for any scholarly activity can vary greatly depending upon the person and the way the activity is carried out, but we do not want this documentation policy to require each faculty member to perform record keeping that would detract from their productivity. So, for common activities, we provide a standard hourly allocation that represents a defensible, conservative value for time typically spent on such an activity over the course of a year.

If a faculty member wishes to use a value different from the standard allocation, they are free to do so, but they must then provide justification for the departure.

2.1 Research

While there are many activities associated with research, they are all linked to products, which are what we measure.

2.1.1 Publications

Publications in peer-reviewed journals or peer-reviewed conferences are expected. We recognize that some peer-reviewed publications are more prestigious than others, but the purpose of this form is to track workloads, not judge or reward prestige or popularity of a product. We acknowledge that individual publications may require more or less time to produce and some papers have more or less contribution from coauthors; the standard hourly allocations below are meant to represent conservative, easily defensible values. In special cases where a major monograph has required more than double the time credited for an average refereed paper, the actual time allocated may be used (see “Other research products” below).

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers accepted in refereed journals or conferences; refereed book chapters</td>
<td>4 hours each</td>
</tr>
<tr>
<td>Technical reports produced, non-refereed papers accepted, scholarly reports directed at a lay audience</td>
<td>2 hours each</td>
</tr>
</tbody>
</table>

2.1.2 Proposals

Whereas the expectation is that most research or scholarship will eventually be published, many good research proposals are never accepted for funding due to funding shortages. Nevertheless, faculty are expected to write grant proposals, and these efforts should be credited towards the workload, whether or not the proposals are funded. The purpose of this form is not
to judge the quality of proposals; there is no difference in workload credit between funded and unfunded proposals. However, because smaller proposals are usually narrower in scope and shorter in length, they usually require less time to write and they therefore credited less towards the workload.

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major proposals (&gt; $100,000) submitted</td>
<td>2 hours each</td>
</tr>
<tr>
<td>Smaller proposals (&lt; $100,000) submitted</td>
<td>1 hour each</td>
</tr>
</tbody>
</table>

### 2.1.3 Research Presentations

Presentation of one’s research directly to an audience, whether at a scientific meeting, or by invitation of an academic department, government agency, or other interest group, is an important form of scholarship wherein the researcher’s work is received and discussed in an interactive setting. The preparation of oral and poster presentations can require substantial time, and this time is credited towards the workload.

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Presentations (oral or poster)</td>
<td>1 hour each</td>
</tr>
</tbody>
</table>

### 2.1.4 Other major research products

Each faculty member’s research program and scholarship may include unique elements that do not fall neatly within the three sections outlined above. It is important to allow for major but less common forms of scholarship to be credited towards the workload. Also under this section, major papers requiring more than double the time credited under “Publications” can be recorded.

For all activities recorded in this section, justification for the hours specified, including details of time invested should be provided.

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Development</td>
<td>Variable (requires justification)</td>
</tr>
<tr>
<td>Monographs, patents, etc.</td>
<td>Variable (requires justification)</td>
</tr>
<tr>
<td>Major grant administration</td>
<td>Variable (requires justification)</td>
</tr>
</tbody>
</table>

### 3. Teaching

### 3.1 Course workload

We assume a normal teaching load is four 3-credit courses per year, or six credit hours of teaching at a time.

For courses that the faculty member has taught before (i.e. “old courses”), a conservative estimate of workload is 3 hours of work per credit per week. For a three credit course, this represents approximately six hours of preparation and three hours of class time per week.
For courses the faculty member has not taught before (i.e. “new courses”), a conservative estimate of workload is four hours of work per credit per week. For a three credit course, this represents approximately nine hours of preparation and three hours of class time per week.

For the purposes of workload documentation, the average weekly workload is determined by multiplying the total credit hours of teaching for the entire year by the standard hourly allocation. Since each credit hour only accounts for half a year's work, the standard hourly allocation is thus half the workload estimate. Thus, if a faculty member teaches 12 credits of "old" courses in a year, the standard hourly allocation of 1.5 hours per credit hour yields an average weekly workload of 18 hours per week, which corresponds to the conservative estimate described above.

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture, lab, or seminar course</td>
<td>Old courses: 1.5 hours per credit hour</td>
</tr>
<tr>
<td>Lecture, lab, or seminar course</td>
<td>New courses: 2.0 hours per credit hour</td>
</tr>
</tbody>
</table>

3.2 Student thesis committees

A second major form of teaching is the individual supervision of students working on their masters or doctoral dissertations. (This could also be viewed as research, but we list it here for convenience).

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair, Graduate Student Committee</td>
<td>1 hour per student</td>
</tr>
<tr>
<td>Member, Graduate Student Committee</td>
<td>0.5 hours per student</td>
</tr>
<tr>
<td>Directed research (ICS/LIS 499, 699)</td>
<td>1 hour per student enrolling in 3 credit hours</td>
</tr>
</tbody>
</table>

4. Service

There are many forms of service, and the list below is not exhaustive. We should not expect to record single events like judging science fairs, but more time-demanding service such as organizing a science fair could be credited under “Other Service”.

4.1 Committees

A lot of important work is done through committees. We recognize that some committees require more time than others, but rather than trying to work this out precisely, a representative workload credit is given per committee membership. We are concerned with recording the workload associated with committee work rather than judging the prestige or value of various committees.

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
</table>
Chair of major university, college, or department committee or non-university committee related to faculty expertise | 2 hours per committee

Membership in a major university committee (departmental, Faculty Senate, University Research Council, etc) or non-university committee related to faculty expertise | 1 hour per committee

Chair of conference/workshop | 2 hours per chairpersonship

4.2 Peer Review

Peer review is the lynchpin of information and computer sciences. It identifies scholarship and verifiable merit. Faculty who regularly participate in the peer review should receive credit towards their workloads for this service. As general guidance, providing written peer review of 10 documents (e.g. manuscripts, grant proposals) should be credited as one workload hour.

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer review: journals or other publications, grant proposals, policy documents, etc</td>
<td>1 hour per 10 documents</td>
</tr>
</tbody>
</table>

4.3 Other Common Service

Other forms of service that are commonly performed include the following:

<table>
<thead>
<tr>
<th>Work Product</th>
<th>Standard Hourly Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department chair</td>
<td>20 hours</td>
</tr>
<tr>
<td>Associate chair</td>
<td>10 hours</td>
</tr>
<tr>
<td>Graduate chair</td>
<td>10 hours</td>
</tr>
<tr>
<td>Undergraduate advisor</td>
<td>10 hours</td>
</tr>
<tr>
<td>Major service to external organization</td>
<td>Variable hours (must justify)</td>
</tr>
</tbody>
</table>
5.0 Example Workload Document

The following page presents workload documentation for a hypothetical year by a hypothetical ICS faculty member. As noted above, this documentation is produced once a year by each faculty member in January and documents their accomplishments during the preceding twelve months.

Hours are classified as “SHA” if using the Standard Hourly Allocation. If classified as “V” (Variable), then justification must be provided.
### Workload Documentation for: John Doe

**Workload Period:** 1/1/2010 – 12/31/2010

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>SHA</td>
<td>&quot;Highly complex complications&quot;, Journal of High Complexity, accepted for publication.</td>
</tr>
<tr>
<td>2</td>
<td>V</td>
<td>Major grant administration, &quot;Complex Complications&quot;, National Science Foundation</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Major grant proposal to NIH ($2M), &quot;New Findings in Complex Complications&quot;.</td>
</tr>
<tr>
<td><strong>12</strong></td>
<td></td>
<td><strong>Research Total</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Teaching</strong></td>
</tr>
<tr>
<td>18</td>
<td>SHA</td>
<td>Taught ICS 212, 331, 101, 641 (all old courses)</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Chair, 2 student Ph.D. committees (Jane Doe, John Smith)</td>
</tr>
<tr>
<td>3</td>
<td>SHA</td>
<td>Directed research, 3 students, (Matt Bender, Heather Bowen, Kim Willoughby)</td>
</tr>
<tr>
<td><strong>23</strong></td>
<td></td>
<td><strong>Teaching Total</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Service</strong></td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Chair, ICS Curriculum committee</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Member, ICS Infrastructure committee</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Member, Faculty senate</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Reviewer, 12 documents (ICSE 2010, ISERN 2010)</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td></td>
<td><strong>Service Total</strong></td>
</tr>
<tr>
<td><strong>40</strong></td>
<td></td>
<td><strong>GRAND TOTAL (capped at 40)</strong></td>
</tr>
</tbody>
</table>

### Justification for hours listed as Variable:

- 2 hours are allocated for Major Grant Administration. During the past 12 months, on my $4M NSF grant, I was responsible for writing position descriptions for four administrative hires, producing the ad, interviewing candidates, and training them. This required approximately 100 hours of time, or an average of 2 hours/week.
<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td><strong>Research Total</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Teaching</strong></td>
</tr>
<tr>
<td>12</td>
<td>SHA</td>
<td>Taught LIS 690 (fall) and LIS 705 (fall)</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Advised 10 MLISc Students</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td><strong>Teaching Total</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Service</strong></td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Chair, Curriculum Committee</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td><strong>Service Total</strong></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td><strong>GRAND TOTAL (capped at 20)</strong></td>
</tr>
</tbody>
</table>
ICS Department Workload Documentation Form
as approved by the ICS Faculty, February 18, 2011 (http://goo.gl/IGRrr)

<table>
<thead>
<tr>
<th>Faculty Name:</th>
<th>Kyungim Baek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload Year:</td>
<td>January to December, 2014</td>
</tr>
</tbody>
</table>

### Research Workload:

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>SHA</td>
<td>“Selecting Linear Algebra Kernel Composition Using Response Time Prediction”, Software: Practice and Experience, accepted for publication</td>
</tr>
<tr>
<td>1.0</td>
<td>SHA</td>
<td>“Prediction of mature miRNA and piRNA without a Genome Reference or Precursors”, NIH, NIGMS 5th Biennial National IDeA Symposium of Biomedical Research Excellence, Washington, D.C., June 2014</td>
</tr>
<tr>
<td>1.0</td>
<td>SHA</td>
<td>“Amalgamation of Information”, Art &amp; Science Exhibition at the 22nd Annual International Conference on Intelligent Systems for Molecular Biology, Boston, MA, July 2014</td>
</tr>
<tr>
<td>3.0</td>
<td>V</td>
<td>Development of academia and industry collaborative project</td>
</tr>
<tr>
<td><strong>13.0</strong></td>
<td></td>
<td>Research Workload Total Hours</td>
</tr>
</tbody>
</table>

### Teaching Workload:

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.0</td>
<td>SHA</td>
<td>Taught ICS 101, 141 (4 sections in the Fall semester), 241 (all old courses)</td>
</tr>
<tr>
<td>2.0</td>
<td>SHA</td>
<td>Chair, 1 Ph.D. committee (Stephan Fabel, until Spring), Co-Chair, 1 Ph.D. committee (Mark Menor)</td>
</tr>
<tr>
<td>2.0</td>
<td>SHA</td>
<td>Member, 4 Ph.D. committees (Pavel Senin, Matt Wolff, Paul Billings (EE), Vicent Howard (ME))</td>
</tr>
<tr>
<td>2.0</td>
<td>SHA</td>
<td>Directed research (1 Ph.D. student for Spring semester – Mark Menor, 1 unclassified student for Fall semester – Martin Chang)</td>
</tr>
<tr>
<td><strong>24.0</strong></td>
<td></td>
<td>Teaching Workload Total Hours</td>
</tr>
</tbody>
</table>

### Service Workload:

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>SHA</td>
<td>Member, ICS Curriculum committee</td>
</tr>
<tr>
<td>1.0</td>
<td>SHA</td>
<td>Member, ICS Graduate Program committee</td>
</tr>
<tr>
<td>1.0</td>
<td>SHA</td>
<td>Peer reviewer for PLoS ONE, IVCNZ 2014, ACM-SAC CO-BIO² 2015</td>
</tr>
<tr>
<td><strong>3.0</strong></td>
<td></td>
<td>Service Workload Total Hours</td>
</tr>
</tbody>
</table>

### Justification for hours listed as variable:
- Have meetings and discussions to develop collaborative research project with industry involving bioinformatics and machine vision.
<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SHA</td>
<td>Research</td>
<td>Research presentation at HICSS conference for &quot;Ubiquitous Interpersonal Communication over Ad-Hoc Networks and the Internet&quot;</td>
</tr>
<tr>
<td>2 SHA</td>
<td></td>
<td>Technical Report &quot;Mobility and Address Freedom in AllNet&quot;</td>
</tr>
<tr>
<td>1 V</td>
<td></td>
<td>Software development for the AllNet project.</td>
</tr>
<tr>
<td>4</td>
<td>Research Total</td>
<td></td>
</tr>
<tr>
<td>6 SHA</td>
<td>Teaching</td>
<td>ICS 690, Spring and Fall 2014</td>
</tr>
<tr>
<td>9 SHA</td>
<td></td>
<td>ICS 351, Spring 2014</td>
</tr>
<tr>
<td>9 SHA</td>
<td></td>
<td>ICS 651, Spring 2014</td>
</tr>
<tr>
<td>24</td>
<td>Teaching Total</td>
<td></td>
</tr>
<tr>
<td>10 SHA</td>
<td>Service</td>
<td>Graduate Chair, Fall 2013</td>
</tr>
<tr>
<td>2 SHA</td>
<td></td>
<td>Chair of the HICSS minitrack on Wireless Networks</td>
</tr>
<tr>
<td>12</td>
<td>Service Total</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Overall Total</td>
<td></td>
</tr>
</tbody>
</table>

Justification for hours listed as variable: I have been working to develop software for the AllNet project. I did not keep careful track of the time invested, but it is very likely more than 1 hour/week. The work included releasing versions 3.0 and 3.1, and additional software development for the upcoming version 3.2. More details are available at [http://alnt.org/](http://alnt.org/)
Workload Documentation for: Kimberly A. Binsted  
Workload Period: 1/1/2013 - 12/31/2013

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SHA</td>
<td>1 major proposal to NASA, still under review</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Counted major proposals (2) for which I was a co-I or collaborator as .5 hrs each</td>
</tr>
<tr>
<td>3</td>
<td>SHA</td>
<td>3 research presentations</td>
</tr>
<tr>
<td>12</td>
<td>V</td>
<td>Administering the HI-SEAS grant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 Research Total</td>
</tr>
</tbody>
</table>

Teaching

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>SHA</td>
<td>101 (Spring 2014, 4 credits), 111 (Spring 2014, 3 credits), 461 (Fall 2014, 3 credits)</td>
</tr>
<tr>
<td>1.5</td>
<td>SHA</td>
<td>Committee member for 3 PhD students (2 in astronomy, 1 in ICS)</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Chair for 1 PhD student (ICS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17.5 Teaching Total</td>
</tr>
</tbody>
</table>

Service

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>SHA</td>
<td>Faculty Senate and Committee for Student Affairs (Spring 2014)</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Chair of ICS Outreach Infrastructure Committee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5 Service Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 Grand Total (capped at 40)</td>
</tr>
</tbody>
</table>

Justification for hours listed as variable:

Administering the UH part of the HI-SEAS project (funded under the NASA Human Research Program) took at least two days of a typical week in 2014 (including summer), so this estimate is conservative.
<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA/V</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>24</strong></td>
<td></td>
<td><strong>Research Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA/V</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
<td>SHA</td>
<td>ICS632, “Principles of High-Performance Computing”, Fall 2014</td>
</tr>
<tr>
<td><strong>15.5</strong></td>
<td></td>
<td><strong>Teaching Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA/V</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>SHA</td>
<td>ICS Associate Chair, Fall 2014</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td><strong>Service Total</strong></td>
</tr>
<tr>
<td><strong>40</strong></td>
<td></td>
<td><strong>GRAND TOTAL (capped at 40)</strong></td>
</tr>
</tbody>
</table>
### Workload Documentation for: David N. Chin
**Workload Period: 1/1/2014 – 12/31/2014**

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>SHA</td>
<td>paper in UMAP Conference</td>
</tr>
<tr>
<td>4</td>
<td>SHA</td>
<td>paper in EMPIRE Workshop (refereed)</td>
</tr>
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<td><strong>8</strong></td>
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<td>1</td>
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<td>ICS 499 (1 student x 3 credit hours)</td>
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<td>2</td>
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<td>co-taught ICS 101 twice</td>
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<td>Chair, dissertation committee for William Wright</td>
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<td>Member, thesis committee for Ali Altunkaya</td>
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<td>Manoa Faculty Senate, Chair of CAB</td>
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<td>Member, ICS Curriculum, Grad, Infrastructure, Outreach Infrastructure Committees</td>
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<td>Peer review for UMAP 2014, SBP14, HT'14, <em>UMUAI</em> journal</td>
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| 10    | SHA      | Papers, book chapters and edited books  
| 2     | SHA      | National Science Foundation Grant administration, “Planning a Project for the Pacific Islands “ |
| 2     | SHA      | National Science Foundation Grant administration, " Broadening Studio-Based Learning in Computing Education " |
| 2     | SHA      | National Science Foundation Grant administration, Teaching Strategic, Operational, and Defensive Cybersecurity to the Next Generation from Sea to Shining Sea” and "Partnership in Securing Cyberspace through Education and Service” |
| 16    |          | **Research Total** |
|       |          | **Teaching** |
| 14    | SHA      | Taught ICS 101 F14 and Taught ICS 390 (Spring and Fall) |
| 1     | SHA      | Chair, 1 student Ph.D. committees ICS (Matt Wolff) Outside Member EdTech: Monica Boon |
| 1     | SHA      | 2 Directed research projects, |
| 16    |          | **Teaching Total** |
|       |          | **Service** |
| 5     | SHA      | NCWIT Outreach Chair |
| 1     | SHA      | ICS Curriculum committee; ICS Infrastructure committee |
| 1     | SHA      | Manoa Faculty Senate; Committee on Athletics; Athletics Advisory Board, |
| 1     | SHA      | UHPA Board of Directors (BOD) and Chair of Finance Committee (IFAC) |
| 8     |          | **Service Total** |
| 40    |          | **GRAND TOTAL (capped at 40)** |
# Workload documentation for: Rich Gazan

**Workload period:** 1/1/2014 – 12/31/2014

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<td>Co-Investigator, &quot;From the Interstellar Medium to Life – Astrobiology Water Cycles,&quot; NASA Astrobiology Institute grant proposal.</td>
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<td>Co-Principal Investigator, &quot;Online Q&amp;A in STEM Education: Curating the Wisdom of the Crowd,&quot; Institute of Museum &amp; Library Services grant proposal.</td>
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<td>(others not listed to comply w/ 40 hr cap)</td>
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<td>18</td>
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<td>Coordinator, CIS PhD program</td>
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<td>Chair, LIS Working Committee on Accreditation</td>
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<td>Chair, two LIS Search Committees (one faculty, one staff)</td>
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<td>Member, UH Graduate Council</td>
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<td>Reviewer, ~12 manuscripts</td>
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<td>GRAND TOTAL (capped at 40)</td>
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**Justification for hours listed as variable:** From Feb-Dec 2014 I assumed the duties of the half-time CIS Coordinator APT, as the position has not been approved for rehire after the prior coordinator left.
**Workload Documentation for: Peter Jacso**  
**Workload Period: 1/1/2014 – 12/31/2014**

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<tbody>
<tr>
<td>4</td>
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<td>Article: &quot;Microsoft Academic Search: A disappearing act&quot;, Online Searcher (under review)</td>
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<td>4</td>
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<td>Article: &quot;Library &amp; information science journals' league list from Google Scholar Metrics for Publication service: the pros and the cons, Online Information Review (under review)</td>
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<td>4</td>
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<td>Article: &quot;Recommendations for enhancing the Scimago database by user controllable citation window&quot; El Profesional de la Informacion (to be revised)</td>
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<tr>
<td>2</td>
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<td>Conference paper: &quot;Measuring research productivity and impact of faculty at Southeast Asian universities. Submitted for CONSAL (Conference of Southeast Asian Libraries)</td>
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<td>Conference paper: &quot;Measuring the scholarly standing of marketing journals by Thomson’s JIF-5 and Google Scholar’s h-5 impact factor for collection development&quot;. International Symposium of Education in LIS</td>
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**Research Total**

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<td>LIS 663: Basic Database Searching (previously taught course)</td>
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<td>LIS 663: Basic Database Searching (previously taught course)</td>
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**Teaching Total**

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<tr>
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<td>Preparing proposal for a new LIS course on Informetrics, developing a draft of the curriculum, reading list and assignments</td>
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<td>SHA</td>
<td>Peer reviewing for JASIST, Scientometrics, Journal of Informetrics, OIR</td>
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<td>V</td>
<td>Data collection and analysis for the Faculty chapter of the ALA Accreditation Report, preparing a draft for the chapter</td>
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<tr>
<td>1</td>
<td>V</td>
<td>Preparing a draft of the Faulty chapter of the Accreditation Report</td>
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<tr>
<td>1.0</td>
<td>SHA</td>
<td>Co-chairing LIS Curriculum Committee</td>
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<td>Ongoing evaluation of student learning outcomes of all LIS courses</td>
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**Service Total**

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Workload Documentation for: Philip M. Johnson  
Workload Period: 1/1/2014 - 7/31/14 (Sabbatical Fall, 2014)

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<tr>
<td>4</td>
<td>SHA</td>
<td>Makahiki: An open source serious game framework for sustainability education and conservation (2014 International Conference on Sustainability, Technology, and Education)</td>
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<td>Enabling active participation in the Smart Grid through crowdsourced power quality data (NSF CyberSEES proposal)</td>
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Justification for hours listed as variable:  
N/A
Workload Documentation for Gerald Ken Hin Lau

Workload Period: January 1, 2014 to December 31, 2014

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<td>Student Counseling *</td>
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<td>Cyber Range Development **</td>
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<td>SHA</td>
<td>Grey Hats RIO ***</td>
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<td>Cyber Security Curriculum Development ****</td>
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<td>V</td>
<td>Outreach Programs*****</td>
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| 40    |          | Grand Total (Capped at 40) |

Notes:

This Faculty Specialist (S Faculty) position does not require research or teaching as an “I” or “R” faculty. The position focuses on counseling and assisting students with their career choices in computer science, aligning their classes to meet their career goals, developing outreach programs, and assisting the ICS department and faculty to develop and refine the academic programs.

* Held 1102 student advising session/appointments dealing with program pathways, career and areas of interest, course selection and scheduling, academic discipline, etc.

** Working with ITS, the Hawai‘i National Guard, and industry partner, UH hosted a cyber-defense exercise based on the Hawai‘i National Guard’s Makani Pahili exercise.

*** Held weekly meetings to prepare student for the National Cyber League and the Collegiate Cyber Defense Competitions.

**** As an ongoing project, ICS is working with the other nine campuses to create a system wide curriculum in Information Assurance and Cyber Security. This has resulted in a submission from ICS to become a Center of Academic Excellence in Research.

***** Continue to work with intermediate and high school programs to develop student interest in computer science.
Workload Documentation for: Jason Leigh  
Workload Period: 1/1/2014-12/31/2014

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<td>SHA</td>
<td>SAGE2 presentation at Supercomputing 2014.</td>
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<td>1</td>
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<td>SAGE2 presentation at CineGrid 2014.</td>
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<td>1</td>
<td>SHA</td>
<td>NSF Sustainable Software for Cyber-Infrastructure Workshop.</td>
</tr>
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<td>1</td>
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<td>Grant administration, &quot;SAGEnext&quot;, National Science Foundation.</td>
</tr>
<tr>
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<td>NSF ($16K / 8K UH) REU application for SAGEnext [Awarded].</td>
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<td>NSF ($162K) CIF21 DIBBs: VisBRICS: Building Reusable and Interoperable Components for Scientific Data Integration, Visualization and Analysis [Pending].</td>
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<td>NSF EAGER (300K/58K UH) EAGER: Collaborative: Articulate: Augmenting Data Visualization With Natural Language Interaction [Awarded].</td>
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<td>SHA</td>
<td>NSF ($5M/997K UH) Collaborative Research: IRNC: AMI: NetSage - An open, privacy-aware, network measurement, analysis, and visualization service. [Recommended for Funding].</td>
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<th>Taught ICS 111, 691 (all new courses).</th>
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<td>Directed research, 2 students, (Dylan Kobayashi, Alberto Gonzalez).</td>
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| 15 | Teaching Total |

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<td>Reviewer, 1 document (SIGCHI15).</td>
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<td>Native Hawaiian Science &amp; Engineering Mentorship (Hoaliku O’Connell).</td>
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| 4  | Service Total |

| 40 | GRAND TOTAL (capped at 40) |

1 hours are allocated for Major Grant Administration. During the past 12 months, on my $5M NSF SAGEnext grant, I was principal investigator which required 50 hours of time or an average of 1 hours/week.
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<td>Depeng Li, et al. “P3: Privacy Preservation for Appliance Control</td>
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<td>Application in Smart Grids”, IEEE Internet of Things, Vol. 1(5), pp. 414-</td>
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<td>429, Oct. 2014 (J)</td>
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<td>Depeng Li, et al. “Efficient, Fault-Diagnosable Authentication Scheme</td>
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<td>for Smart Grids”, in press, Security and Communication Networks (I)</td>
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<td>Applications on the Internet of Things”, IEEE Conf. APWC-CSE. (C)</td>
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<td>Paul Soulier and Depeng Li, “Blueprint for an Embedded Systems</td>
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<td>Programming Language”, accepted by SIT conf. 2014. (C)</td>
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<td>Paul Soulier and Depeng Li, “Memory and Type Safety for Embedded</td>
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<td>Andreas Brauchli and Depeng Li, “Using Near-Realtime Voice Data for</td>
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<td>communication Authentication”, extended abstract, USENIX Security.</td>
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<td>Depeng Li, “Prevent Malicious Controller in a Physical, HUMAN and</td>
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<td>Cyber Triad”, extended abstract, accepted, USENIX Security’14 (C).</td>
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<td>PI, apply for AFOSR Grant, $450K, “Prevent Malicious Controller from</td>
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<td>Control System within a Physical, Human and Cyber Triad”.</td>
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<td>PI, apply for Google Grant, $61K, “Pick the Right Controller from the</td>
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<td>Wrong, Safety Control for Google Driverless Vehicles”.</td>
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<td>ICS 491 Spring (new, 6) , ICS 691 in fall (old, 3)</td>
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<td>Master students (Paul and Andreas)</td>
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<td>V</td>
<td>Ph.D. (Ted) dissertation committee member</td>
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<td>Committee member for Senior Honor Undergraduate Student(Jordan)</td>
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<td>Onsite NSF Proposal Review Panelist, Arlington VA, April 2014.</td>
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<td>Presentation: ICNC International Conference, Honolulu, Feb. 2-5 2014</td>
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<td>Presentation: IEEE APC IEEE Conf. APWC-CSE, Fiji, Nov. 2-5 2014</td>
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<td>Council Member, Undergraduate Research Opportunity Council</td>
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<td>Co-pi, Application for NSA-Academic Center of Excellent (ACE-R)</td>
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<td>Reviewed 11 papers for IEEE TVT (4), IEEE TII(1),IEEE IOT-J (5), SCN (1)</td>
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<td>“Cost-Optimal Execution of Boolean Query Trees with Shared Streams”, published in International Parallel &amp; Distributed Processing Symposium 2014.</td>
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<td>Small proposal ($70K) to HECO</td>
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**Teaching**

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<td>Taught ICS321 (spr &amp; fall), ICS101 and ICS621 (all old courses).</td>
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<td>SHA</td>
<td>Directed Research (Chris Foo, Alex Cam Liu, Todd Taomoe, Tianli Mo)</td>
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**Service**

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<td>Member, ICS Graduate Committee</td>
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<tr>
<td>1</td>
<td>SHA</td>
<td>Member, Undergraduate Research Council</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Peer Review (20 papers)</td>
</tr>
<tr>
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<td>SHA</td>
<td>Local Organization Chair for VLDB</td>
</tr>
<tr>
<td>8</td>
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<tr>
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<tr>
<td>Hours</td>
<td>SHA or V</td>
<td>Research</td>
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<tr>
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<tr>
<td>4</td>
<td>SHA</td>
<td>“I/O-efficient range minima queries”, 14th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT), 2014</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>NSF grant proposal (major proposal)</td>
</tr>
<tr>
<td>1</td>
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<td>Presentation at the 9th Scheduling for Large Scale Systems Workshop</td>
</tr>
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<td>1</td>
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<td>Presentation at the 14th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT)</td>
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<td>1</td>
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<td>Invited talk at the MADALGO Center, Aarhus Denmark</td>
</tr>
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<td>Invited talk at UC Berkeley</td>
</tr>
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<td>1</td>
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<td>3 presentations at Leilehua High School</td>
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<td>1</td>
<td>SHA</td>
<td>3 presentations at Waipahu Intermediate School</td>
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<tr>
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| Research Total |
| 40 |

| Teaching |
| 16 |

| Teaching |
| 16 |

| Teaching Total |
| 16 |

| Service |
| 1 |

| Service |
| 2 |

| Service |
| 2 |

| Service |
| 3 |

| Service |
| 8 |

| Service Total |
| 8 |

| Service Total |
| 40 |

| GRAND TOTAL (capped at 40) |
| 40 |
Workload Documentation for: Michael-Brian Ogawa  
Workload Period: 1/1/2014 – 12/31/2014

<table>
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<th>Hours</th>
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<tbody>
<tr>
<td>1</td>
<td>V</td>
<td>LIS 696 (practicum) sessions. “Integrating Video into library instruction” and “Electronic Portfolios”</td>
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<table>
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<tr>
<th></th>
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<td>12</td>
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<td>ICS 101</td>
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<td>9</td>
<td>SHA</td>
<td>ICS 390</td>
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<td>LIS 694</td>
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<table>
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<tr>
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<tr>
<td>1</td>
<td>SHA</td>
<td>Engaged Learning Working Group</td>
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<tr>
<td>1</td>
<td>SHA</td>
<td>Department of Educational Technology Advisory Board</td>
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<td>1</td>
<td>SHA</td>
<td>Manoa Distance Learning Committee</td>
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<tr>
<td>1</td>
<td>SHA</td>
<td>Hawaii Educational Research Association Board Member</td>
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<tr>
<td>.5</td>
<td>SHA</td>
<td>Peer review (Hawaii Educational Research Association: 5 documents)</td>
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<td></td>
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<table>
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<tbody>
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</table>

Justification for hours listed as Variable:

- Co-author for “Improving large-enrollment instruction with game-based mechanics” article.
- Primary author for “Outlook 2013 : in practice” instructional text.
- Developed and implemented 2 sessions for LIS 696 (school librarian practicum students) on integrating video into instruction and electronic portfolios.
Workload Documentation for: Dusko Pavlovic  
Workload Period: 1/1/2014 – 12/31/2014

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Research</th>
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<tbody>
<tr>
<td>2</td>
<td>SHA</td>
<td>&quot;Towards a Science of Trust&quot;, submitted to HoTSoS</td>
</tr>
<tr>
<td>1</td>
<td>V</td>
<td>Major grant administration, &quot;Semantic Completions: Unifying the Wave and the Particle Views of Network Traffic&quot; ($375K), AFOSR, contract to RHUL, subcontract to UHM</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Major grant proposal to NSA ($450K), &quot;Advanced, Trusted, Secure Hardware and Software System Computational Technologies&quot; (with Vanderbilt U., Berkeley and MIT) - funded</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Major grant proposal to NSF-EAGER ($250K), &quot;Economics of Security&quot; (with Ruben Jarez of Dept. of Economics)</td>
</tr>
<tr>
<td>7</td>
<td>SHA</td>
<td>Invited presentations: Cybersec2025, CIS, Dept. of Math, GaLOP, SURE, Dagstuhl Eco-Categories, ICS 101</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td><strong>Research Total</strong></td>
</tr>
</tbody>
</table>

| 18    | SHA      | New courses: 655 (as 691), 355 (as 491), 423 (as 623) |
| 1     | SHA      | Directed research |
| 19    |          | **Teaching Total** |

| 2     | V        | CAE Application |
| 3     |          | **Service Total** |
| 40    |          | **GRAND TOTAL** |

Justification for hours listed as Variable:

- 1 hour is allocated for Major Grant Administration. The ongoing interactions with the AFOSR program managers, RHUL senior management and CS Dept and contract management on the RHUL side, and coordinating the initial steps towards accepting this contract on the UHM side, has been a complicated operation. Increase in funding has been obtained.
- 2 hours allocated to CAE application. This involved 2 trips, coordinating between two Colleges, and interacting with the deans, the Chancellor and the VPRI. But no points left.
ICS Department Workload Documentation Form  
as approved by the ICS Faculty

<table>
<thead>
<tr>
<th>Faculty Name:</th>
<th>Guylaine Poisson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload Year</td>
<td>January to December 2014</td>
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**Research Workload:**

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<th>Hours</th>
<th>SHA or V</th>
<th>Description</th>
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<tbody>
<tr>
<td>4</td>
<td>SHA</td>
<td>Paper in Int. J. Mol. Sci</td>
</tr>
<tr>
<td>4</td>
<td>SHA</td>
<td>Paper beta-propeller (in revision)</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Abstract/poster NISBRE</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Abstract/poster ISMB</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Grant proposal Gates</td>
</tr>
<tr>
<td>5</td>
<td>V</td>
<td>Industry/academy collaboration (1)</td>
</tr>
<tr>
<td>16</td>
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<td><strong>Research Workload Total Hours</strong></td>
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**Teaching Workload:**

<table>
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<th>Hours</th>
<th>SHA or V</th>
<th>Description</th>
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<tr>
<td>18</td>
<td>SHA</td>
<td>ICS110, ICS110, ICS110, ICS475</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Chair 1 Master student, 1PhD (0.5 year)</td>
</tr>
<tr>
<td>3</td>
<td>SHA</td>
<td>Directed Research 9 credits</td>
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<td>SHA</td>
<td>PhD Committee member 2 PhD students</td>
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**Service Workload:**

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<th>Description</th>
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<td>0.5</td>
<td>SHA</td>
<td>Senator Faculty/Senate 1 semester</td>
</tr>
<tr>
<td>0.5</td>
<td>SHA</td>
<td>Review papers Conference: ACM SAC BIO, Journals: Bioinformatics, IEEE</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td><strong>Service Workload Total Hours</strong></td>
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<td><strong>40 GRAND TOTAL (capped at 40)</strong></td>
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Justification for hours listed as variable:

- 1 Research collaboration with industry
## Workload Documentation for: Nancy E. Reed
### Workload Period: 1/1/2014 - 12/31/2014

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<th>Research</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>SHA</td>
<td>Preparation of manuscript &quot;Phonocardiogram Acquisition and Analysis for Disease Detection&quot;</td>
</tr>
<tr>
<td>3</td>
<td>V</td>
<td>Survey article and book contract with Springer “Automated Phonocardiogram Analysis and Interpretation”.</td>
</tr>
<tr>
<td>5</td>
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<td><strong>Research Total</strong></td>
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## Teaching

<table>
<thead>
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<th>Hours</th>
<th>SHA or V</th>
<th>Research</th>
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</thead>
<tbody>
<tr>
<td>16</td>
<td>SHA</td>
<td>Spring: ICS 313 [32 students], Fall: ICS361 [41] (first time taught), ICS606 [9]/EE606 [1] (substantial revisions)</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Directed research (Victor Myagkikh, Robert Puckett)</td>
</tr>
<tr>
<td>3</td>
<td>V</td>
<td>Additional preparation for ICS 361 (first time taught)</td>
</tr>
<tr>
<td>21</td>
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## Service

<table>
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<th>Research</th>
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<tbody>
<tr>
<td>1</td>
<td>SHA</td>
<td>Ph.D. defense committees (Deborah McBride, Nursing, C. Elise Thompson, Nursing)</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Chair: ICS Infrastructure committee, software and hardware</td>
</tr>
<tr>
<td>2</td>
<td>V</td>
<td>Chair of Graduation ceremony for ICS, Spring 2014 and Fall 2014.</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Chair: CIS Biomedical Informatics area</td>
</tr>
<tr>
<td>1</td>
<td>V</td>
<td>National Center for Women &amp; IT (NCWIT) Aspirations in Computing UH co-chair.</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Member: CS Graduate committee</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Member: ICS Outreach committee.</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Member: ICS Curriculum committee and 141/241/242 discussion group.</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Recommendation letters, 10+</td>
</tr>
<tr>
<td>1</td>
<td>V</td>
<td>Meetings with Nursing faculty and staff.</td>
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<td>14</td>
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<tr>
<td>40</td>
<td></td>
<td><strong>Grand Total (capped at 40)</strong></td>
</tr>
</tbody>
</table>

### Justification for hours listed as variable:

**Research:** Three hours is estimated for original research. Search for new papers in phonocardiogram analysis and decision support. Get paper details and pdf files and categorize articles for a survey. A growing collection of 800+ research publications collected so far on phonocardiograms, decision-support, artificial intelligence in Medicine, signal processing and cardiology.

**Teaching:** Three hours are estimated for additional preparation for ICS361 (first time taught). Developed new material, lectures and assignments.

**Service:** Two hours is estimated for Spring and Fall graduation receptions. Purchase supplies, create flyers, order food, send email and process student and faculty RSVPs, print badges, info to Chair and student help for business cards and congratulations letters, folders for graduates, print high GPA certificates, pick up cake and coffee, etc.

One hour is estimated for NCWIT activities: Special lunch and awards ceremony in the Spring. Invite those unable to attend the NCWIT lunch to come to the Spring ICS graduation reception to receive their awards.

One hour is estimated for meetings with Nursing faculty, staff and students re: ICS 614 as a required course in their curriculum. Participation in preparation, visit and **successful outcome** of application for accreditation of the new PhD. program in Nursing Practice, approved in 2014.
ICS Department Workload Documentation Form
as approved by the ICS Faculty, February 18, 2011 (http://goo.gl/IGRrr)

Faculty Name: Scott Robertson
Workload Year: January to December, 2014

Research Workload:

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<th>Description</th>
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<tbody>
<tr>
<td>4</td>
<td>SHA</td>
<td>Publication: Politics and young adults … <em>Digital Government Soc.</em></td>
</tr>
<tr>
<td>4</td>
<td>SHA</td>
<td>Publication: Hybrid media consumption … <em>CSCW</em></td>
</tr>
<tr>
<td>4</td>
<td>SHA</td>
<td>Publication: Social media supporting deliberation … <em>CSCW</em></td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>NSF proposal submission (&gt;-$100,000)</td>
</tr>
<tr>
<td>4</td>
<td>V</td>
<td>Software development and grant admin. for NSF grant</td>
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Teaching Workload:

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<td>4.5</td>
<td>SHA</td>
<td>Taught ICS 664</td>
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<td>4.5</td>
<td>SHA</td>
<td>Taught ICS 667</td>
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<td>SHA</td>
<td>Directed Research, ICS 669 (4 students/13hrs)</td>
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<td>SHA</td>
<td>Directed Research, CIS 669 (3 students/13hrs)</td>
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<td>SHA</td>
<td>Member, 3 PhD committees (Roubing Chi, Lisa Chuang, Marc Menor)</td>
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<td>SHA</td>
<td>Chair, 3 Masters committees (Robert Ward, David Beutel, Zach T)</td>
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Service Workload:

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<td>Faculty Senate</td>
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<tr>
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<td>SHA</td>
<td>Co-chair, Digital Gov. Soc. Annual conference</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Doctoral Consortium co-chair - CABS conference</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>HICSS Open Government minitrack co-chair</td>
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<tr>
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<td>SHA</td>
<td>Peer review (IJHCS, JITP, ACM SIGCHI, DGO, HICSS)</td>
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<tr>
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<td>SHA</td>
<td>Associate Editor (TOCHI)</td>
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<td><em>Service Workload Total Hours</em></td>
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**40** *GRAND TOTAL (capped at 40)*

Justification for hours listed as variable:

I was awarded a major NSF grant in summer, 2011. I am allotting 2 hours for software development, project planning, and hiring and supervision of work of 2 RAs and one postdoctoral researcher.
# Workload Documentation for: Peter-Michael Seidel

**Workload Period:** 1/1/2014 - 12/31/2014

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<th>SHA or V</th>
<th>Research</th>
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<td>SHA</td>
<td>Two papers at the 15th International Conference on Microprocessor Test and Verification (MTV2014) titled: &quot;A Case for Multi-level Combination of Theorem Proving and Model Checking&quot; and &quot;Directed Test Case Generation for x86 Instruction Decoding&quot;.</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Manuscripts submitted to IEEE International Symposium on Computer Arithmetic (2015) titled: &quot;Redundant Prescaled Division&quot; and &quot;Iterative Floating-Point Fused Multiply-Add&quot;.</td>
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<tr>
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<td>Variable</td>
<td>Directing summer research in NHSEMP program titled: &quot;Logic design flow from schematic capture to quantitative evaluation&quot;, and directing TA for mentoring.</td>
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<th>Teaching</th>
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<td>SHA</td>
<td>ICS431, &quot;Computer Architecture&quot; taught in SP2014 (new course)</td>
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<td>SHA</td>
<td>ICS101, Introduction to Computer Science&quot;, taught in SP2014</td>
</tr>
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<td>SHA</td>
<td>ICS331, &quot;Digital Logic w Microprocessor Design&quot; taught in Fall 2014</td>
</tr>
<tr>
<td>6</td>
<td>SHA</td>
<td>ICS691, &quot;Computer Arithmetic&quot; taught in Fall 2014 (new course)</td>
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<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SHA</td>
<td>Associate Editor for IEEE Transactions on Computers, Special Issue on Computer Arithmetic (8/2014)</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Member of Steering Committee for IEEE Int. Conference on Computer Design</td>
</tr>
<tr>
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<td>SHA</td>
<td>Member of Nat. Sci. Program and Curriculum Committee (PCC)</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Member of the ICS Curriculum Committee</td>
</tr>
<tr>
<td>1</td>
<td>SHA</td>
<td>Computer Engineering Liaison for EE department and CE curriculum committee member. Leading discussions to explore feasibility of ICS242 fast track Discrete Mathematics course.</td>
</tr>
<tr>
<td>2</td>
<td>SHA</td>
<td>Reviewed 20+ articles as Program Committee Member and reviewer for: IEEE International Symposium on Computer Arithmetic, IEEE International Conference on Computer Design and for IEEE Transactions on Computers</td>
</tr>
<tr>
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<td>SHA</td>
<td>Member, Graduate student committee for Paul Soulier.</td>
</tr>
<tr>
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<td>SHA</td>
<td>2nd examiner for 3 master's thesis and 1 bachelor's thesis, Computer Science Department, University of the Saarland.</td>
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<p>| 40    |          | Grand Total (capped at 40) |</p>
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<th>Research</th>
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<td>SHA</td>
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<tr>
<td>2.00</td>
<td>V</td>
<td>Writing papers</td>
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<td>V</td>
<td>Initiated New Research</td>
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<tr>
<td>0.50</td>
<td>V</td>
<td>Advising IBM Rationale Group/BlueMix Research</td>
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<td>V</td>
<td>Advising on NSF/research.gov</td>
</tr>
<tr>
<td>9.50</td>
<td>V</td>
<td>Software Development</td>
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<tr>
<td>0.50</td>
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**Research Workload Total Hours: 18.00**

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Teaching</th>
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<tbody>
<tr>
<td>4.50</td>
<td>SHA</td>
<td>ICS 665 F14</td>
</tr>
<tr>
<td>4.50</td>
<td>SHA</td>
<td>ICS 465 F14</td>
</tr>
<tr>
<td>4.50</td>
<td>SHA</td>
<td>ICS 315 S14</td>
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<td>4.50</td>
<td>SHA</td>
<td>ICS 101 S14</td>
</tr>
<tr>
<td>1.50</td>
<td>V</td>
<td>ICS 465 F14 revised content</td>
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<td>1.00</td>
<td>V</td>
<td>Shucun Dong PhD advisor</td>
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**Teaching Workload Total Hours: 20.50**

<table>
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<tr>
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<th>Service</th>
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<tbody>
<tr>
<td>0.50</td>
<td>V</td>
<td>Support for Research at UH communication Dept.</td>
</tr>
<tr>
<td>0.50</td>
<td>V</td>
<td>IBM Synapse University</td>
</tr>
<tr>
<td>0.50</td>
<td>V</td>
<td>Halawai Scheduling</td>
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</table>

**Service Workload Total Hours: 1.50**

**Total Workload Hours: 40.00**

**Justification for hours listed as variable:**

**Research:** Continued research on “Flip-Flop Instructional Technology” that requires students to construct video quizzes with lecture video recordings. Employed proof-of-concept authoring tool for the construction of such quizzes in ICS 465 in Fall 2014. Started a new research direction in agile software engineering based on Direct User Learning and Feedback Embedded in Tooltip (user interface widget) DULFET. Developed software that integrates DULFET in common user interface framework for web based applications. Presented the DULFET concept at research institutions in California/Silicon Valley: IBM Innovation Ctr. Foster City and Bluemix UI R&D (remote lecture). Initiated writing articles about DULFET. Submitted Letter of Intent for NSF 14-610 grant solicitation that integrated FITT and DULFET with collaboration of the Watson Education Research group at IBM Yorktown Heights Research Center. Initiated UX advising for NSF – invited to give a lecture on UI issues for research.gov.

**Teaching:** Completely revised ICS 465 content so that it is based on newest web standards, Web APIs and frameworks rather than on user interface frameworks that are not widely used anymore (JavaFX-Script, Java Swing, etc.). Advised PhD student
Shucun Dong with developing methodology based on DULFET technology.

**Service:** Further improved software that simplifies cumbersome scheduling for distance education lectures with UH’s Halawai system. Assisted research at UH Communication Department that used FFIT authoring tool for the construction of quizzes based on videos. Initiated discussions with IBM Research at Amalden incorporating IBM’s Synapse University based on novel TrueNorth / Corelet / Compass into UH ICS curriculum.
Workload Documentation for: Kazuo Sugihara  
Workload Period: 1/1/2014 – 12/31/2014

<table>
<thead>
<tr>
<th>Hours</th>
<th>SHA or V</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>V</td>
<td>Collaboration with researchers in Hiroshima City Univ.</td>
</tr>
<tr>
<td>8</td>
<td>V</td>
<td>Reading papers and investigation of problems on algorithms and distributed computing</td>
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<td><strong>Research Total</strong></td>
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<tr>
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<table>
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<tr>
<th></th>
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<th>Teaching</th>
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</table>
| 22    |          | Taught ICS 141 & 641 in Spring and ICS 241 & 311 in Fall  
ICS 141 and 241 each with 2 sections of recitations (2 × 2 × 1 = 4) |
| 3     | V        | Revised my lecture notes for ICS141 to be an α-version of a textbook |
| 1     | V        | Revised an α-version of my textbook for ICS241 |
| 26    |          | **Teaching Total** |
|       |          | 36        |

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<tr>
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<th>SHA</th>
<th>Service</th>
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</table>
| 4     |          | Taught voluntarily a graduate course (new) of 2 credits on technical communication in June at Hiroshima City Univ. (an international exchange partner of UHM)  
| 4     |          | **Service Total** |
| 40    |          | **GRAND TOTAL (capped at 40)** |

Justification for hours listed as Variable:

- Two hours were allocated for collaborative research activities on network protocols and security with Prof. Yoshiaki Kakuda and his team of researchers at Hiroshima City University.

- Eight hours were allocated for reading papers and investigating problems in the field of my speciality (algorithms and distributed computing).

- Three hours were allocated for upgrading my lecture notes for ICS 141 so that they would be used as an α-version of textbook for ICS 141 instead of the Rosen’s textbook. [http://pearl.ics.hawaii.edu/~sugihara/courses/ics141s14/notes/](http://pearl.ics.hawaii.edu/~sugihara/courses/ics141s14/notes/)

- One hour was allocated for revising my α-version of my textbook for ICS 241 that has been used instead of the Rosen’s textbook since Fall 2013. [http://pearl.ics.hawaii.edu/~sugihara/courses/ics241f14/notes/](http://pearl.ics.hawaii.edu/~sugihara/courses/ics241f14/notes/)