

FACULTY ACTIVITIES REPORT

CUMULATIVE

NAME: Richard John Botting

FROM: September 9th 2006

COLLEGE: Natural Science

TO: September 24th 2011
SCHOOL: Computer Science & Engineering

I. TEACHING

A. Teaching and Instructionally Related Assignments

1. Courses Taught, Sep 2006 - Aug 2011

CSE201 Computer Science I [<http://cse.csusb.edu/dick/cs201>] [item 624+625]

CSE202 Computer Science II [<http://cse.csusb.edu/dick/cs202>] [item 624+626]

CSE320 Programming Languages [<http://cse.csusb.edu/dick/cs320>] [item 624+627]

CSE372 Computers in Organizations [<http://cse.csusb.edu/dick/cs372>][item 624+628]

CSE375 Requirements Analysis [<http://cse.csusb.edu/dick/cs375>][item 624+629]

CSE489 Senior Seminar [<http://cse.csusb.edu/dick/cs489>] [item 624+630]

Note: All these courses have a web site that describes the content of every meeting, all assigned work, and a blog of the significant events that occurred when the class was taught.

2. Other

I have been associated as advisor or committee member with at least **38** completed Senior Projects, Internships, Independent Studies, Masters Projects & Theses [item 623]. One MS project took 7 years [item 592]. One piece of work was prepared for presentation at a conference [item 587, JAR #2]. I have also helped graduate students without being on their committee [item 605].

B. Development of New Courses & Programs &/or Innovative Approaches

Innovations

(1) Extended **nominal assigned work** (Presented at a SIGCSE conference in the last FAR cycle) from CSE320 and CSE488 to other classes. (2) **Surveyed** CSE202 students [item 556]. (3) I helped Matt Richardson develop and complete a **special Masters Program** and supervised the independent studies and projects involved [example item 561]. (4) **Replaced the text** in CSE372 by pages and links on my website.

Curriculum Changes

I proposed and worked out the details to change CSE372 to a senior/graduate level course (CSE557) so that graduate students can also take it.

C. Participation in conferences and seminars on instruction, special preparation for courses and other activities.

Prepared review questions and class exercises for CSE 372 and 375 (on their websites).

D. Other Information...

(1) I am in "Who's Who in America" [item 577,590].

(2) My SOTEs are heavily skewed towards "Excellent" [items 555, 562, 575, 591,593, 600,602, 608,613,616,619]. Students often thank me for my teaching and help or send strange things [items 551, 603]. Alumni also make positive comments [item 554, 583,

II. PROFESSIONAL ACTIVITIES

I study the **theory and practice of software development** [<http://cse.csusb.edu/dick/research.html>].

A. Throughout this period I **published reviews in the "Computer Reviews"** [Summary item 621 + Sample items 542, 544, 546, 550, 552, 557, 566, 573, 578, 588, 595, 604, 607,612, 614,617, 618]. Item 617, in particular, shows high praise by the editor P. Laplante. I slowed down at the start of the period by only reviewing books. In 2010 I set my self the target of having had 100 reviews published by the time I retire and have speeded up to a peak of one review per month. Currently I have submitted a total of 87 reviews since 1999.

B. In 2006-2011 I continued to use and evolve my *MATHS language*. [<http://cse.csusb.edu/dick/math/>] on the WWW. This is designed to support formal (logical and mathematical) methods. Most of my web site now uses it. Throughout the 5 year period I made improvements its design and extended the **depository of mathematical systems** [item 622]. I also added to my **samples of use** [<http://cse.csusb.edu/dick/samples/>].

C. I continued to improve the **tools** that I use to render MATHS for the web. In my **sabbatical**, Spring 2008, I planned to extend the **prototype MATHS tools** into a web application that would let anyone use it, possibly in a social network. The long term goal is to open source the MATHS language and tools with a healthy community developing it after I retire. But progress was slow because of ill-health (hypothyroidism [Item 576]) but when the medication started to work I was able to develop a way for **anybody on the web to use MATHS to create web pages** [item 581, 582, 585, 606]. I experimented with using MATHS with a **project web blog** [<http://cse.csusb.edu/dick/samples/math.html>], and the **PQRST requirements framework** (presented at IWSSD 1985 and ACM CSC 1989). These proved workable but clumsy [item 581]. Between September 2008 and December 2010 the web page was operational, and was ported to the new faculty web server. But nobody used it. This solution used technology that was removed from the faculty web server in December 2010 for security reasons.

D. I added about 1000 items to my *annotated bibliography of software development* (using MATHS). It now has over 5080 items [sample item 582]. I now record the arrival of new items in my **web log of personal and professional activities**. The most recent entries are in <http://cse.csusb.edu/dick/blog.html> with older items archived each year into pages named [blog011.html](#), [blog010.html](#), [blog009.html](#), [blog008.html](#), [blog007.html](#), and [blog006.html](#).

E. I **published a short correction** to a previous publication in IEEE Computer Magazine [item 547]

F. Collaborated [JAR #1 below] with Drs. Yu and Turner on the **Communication Trust Services grant proposal** [items 548,549].

G. I made many small contributions to the **Cellular Automata research** lead by Drs. Schubert and Gomez [item 606]. I maintain a special "drop-box" folder on the cloud where all members of the team can share work. I also printed and FedExed materials to a conference [item 564].

Memberships

I am a member of the IEEE Computer Society, the Association for Computing Machinery (ACM), and LinkedIn.

III. SERVICE

A. Community Service

(1) I maintain the "Unofficial Inland Symphony Association" Page on the world wide web:
<http://cse.csusb.edu/dick/symphony.html>.

(2) Visited the GATE class at Barstow High School [item 558]

(3) Maintain a web site of computer science and software development information. It **gets a lot of traffic**[item 611]. The international distribution is at
<http://www3.clustrmaps.com/counter/maps.php?url=http://cse.csusb.edu/dick/>
It uses HTML forms and PHP to provide searches and accept contributions. I get roughly one contribution per month. [item 543, 560, 563,589, 597, 606, 615].

(4) I donated my spare text books [item 565].

B. Student Academic and Career Advisement

I have the normal number of assigned advisees and advise others when they drop in [item 569].

C. Service to Programs, Departments, School, College, University, and CSU

I was the **External Reviewer** for the CSU Channel Islands [Item 599] and the CSU San Marcos [item 620].

I have served on **many Department/School committees:**

25th Anniversary Committee as chair [item 570, 574]

Undergraduate Curriculum Committee 2009-2011

Graduate Committee 2009-2011

Department Evaluation Committee 2006 [item 567],

Seminar Committee as chair 2006-2011

-- organizing external [items 568, 596, 601] and internal speakers [

<http://cse.csusb.edu/dick/seminar/>],

Honors Committee

Sabbatical Committee (since 2008).

PPI Committee with Zahid Hassan & Dan Fahey Spring 2008

I presented a session at each **department open house**, demonstrating the work students have done in CSE 320
[<http://cse.csusb.edu/dick/openhouse.html>] [items 545, 572, 584, 598, 609].

I help manage the CSE CSUSB Alumni group on LinkedIn.

Worked a table at Graduate Information day 2006 [Item 540]

Welcomed delegation from Incheon University [Item 541]

Interviewed faculty candidates [item 553]

I was interviewed about 25th anniversary by the Sun Telegram [item 579]. I have also enrolled as a CSUSB faculty expert [item 594].

I donate my used copies of "Computer Reviews" and "IEEE Software" to the Department library in JBH307.

I order real computer science books for the library [sample item 580].

I gave a special seminar in memory of Grace Hopper and in celebration of CSEdWeek 2010 [item 610].

I do about one visitation to CSN faculty every other year [item 571].

I attend CNS commencements.

D. Other Activities

I keep a detailed log of my activities on my web site and will place a copy of this document at <http://cse.csusb.edu/dick/FAR2011.pdf>

I keep contact with students, alumni, and colleagues on FaceBook, LinkedIn, and Google+

IV. OTHER INFORMATION APPROPRIATE TO THE EVALUATION CRITERIA

25 years + service to CSUSB [item 559]. Last PPI: 2008-2009[item 586]

I'd like to thank my colleagues for covering for me when my mother died in 2007 and I had to go to England (Feb 12th-Mar2nd and Mar23-Mar30th 2007).

My energy took a hit in 2007 from the continuing treatment to control prostate cancer. Then at the start of 2008 I found it difficult to concentrate and started falling sick. On March 8th I was diagnosed as suffering from hypothyroidism and now take a pill every day [item 576].

Signature

Date

JOINT ACTIVITY REPORT #1

FACULTY MEMBER Richard John Botting

ACADEMIC YEAR 2007-2008

- A. The Communication Trust Services Proposal to NSF.
- B. I Worked with Drs Yu and Turner on the drafts and ideas.
- C. Roughly 25% of the total effort.

JOINT ACTIVITY REPORT #2

FACULTY MEMBER Richard John Botting

ACADEMIC YEAR 2008-2009

A. "Extensible Simulation of Planets and Comets"

B. I worked with Drs. Schubert and Gomez and Natalie Wiser-Orozco on an OO approach to classic numerical problems. I helped with the UML and some proof reading.

C. Roughly 10% of the total effort.