What to Wear: Views on Attire for Teaching CS

Fernando Lemmas (moderator)

Studio 8H  
1st line of address  
2nd line of address  
Telephone number, incl. country code

fernando@snl.edu

Cal T. More

Thoreau College  
1st line of address  
2nd line of address  
Telephone number, incl. country code

cal@thoreau.edu

Ada Necklace

Babbage University  
1st line of address  
2nd line of address  
Telephone number, incl. country code

ada@babbage.edu

Grace M. Hopper

U. S. Navy  
1st line of address  
2nd line of address  
Telephone number, incl. country code

grace@navy.mil

**ABSTRACT**

Appropriate attire for teaching, research, and meetings with administrators, can be a tricky subject to tackle. How we dress says a lot about how we see ourselves in relation to others and goes a long way to creating a department’s culture for learning, collaboration, and leadership. This panel of experts from liberal arts colleges and research universities provide three different perspectives that will spark conversation and reflection on how to balance your clothing preferences with your career goals. The intended audience for this panel are faculty at all stages of their careers especially those who are just starting their careers or those who are considering moving into leadership positions.

**Categories and Subject Descriptors**

• **Information systems➝Database management system engines**   • **Computing methodologies➝Massively parallel and high-performance simulations.**This is just an example, please use the correct category and subject descriptors for your submission*.* The ACM Computing Classification Scheme:

<http://www.acm.org/about/class/class/2012>. Please read the [HOW TO CLASSIFY WORKS USING ACM'S COMPUTING CLASSIFICATION SYSTEM](file:///C:\Users\rodkin\Desktop\BORIS%20IMPLEMENTATION\templates-5dec2014\CCS-HOWTO-v5-2Sep2014.docx) for instructions on how to classify your document using the 2012 ACM Computing Classification System and insert the index terms into your Microsoft Word source file.

**Keywords**

Clothing; T-shirts; Wearable Computing; COBOL

# SUMMARY

Most Computer Science instructors must wear clothing while teaching. The choice of clothing can have an impact on student learning [1, 2] and sends a message to students about the field as a whole [3]. This panel addresses the question of what to wear while teaching by presenting the viewpoints of three different Computer Science instructors. Particular attention will be given to the research basis for panelists’ clothing choices and the impact on student learning.

# PANEL STRUCTURE

Each panelist will be given 15 minutes to present their respective positions. Following the presentation, the moderator will facilitate the audience discussion. We anticipate questions about appropriate attire when teaching undergraduates versus graduate students. Appropriate attire for meeting with the department chair, dean, and upper level administration.

# CAL T. MORE

As an instructor at small liberal arts college, I have always believed that a Computer Science-themed T-shirt is the best attire for teaching. Merits of this approach include ease of doing laundry and low expense. I have found that students do 20% better on binary search tree questions when I teach the material while wearing my favorite BST shirts [4]. An amazing variety of CS-themed shirts are available on the market and it is also quite easy to make your own. I will show examples of T-shirts I have used over the years with great success as well as T-shirts whose message has been misinterpreted.

# ADA NECKLACE

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

*Conference’10*, Month 1–2, 2010, City, State, Country.

Copyright 2010 ACM 1-58113-000-0/00/0010 …$15.00.

DOI: 10.475/1234

As researcher on wearable computing, I believe it is important to integrate my research with my classroom teaching. Wearing smart fabrics with integrated LEDs allows me to really emphasize a point in a memorable way. Sensors allow me to control my slides by merely touching together my gloved fingers. In addition, I find increased efficiency in my own tasks while at the same time improving student learning outcomes [5]. With my optical head-mounted display I can view students’ test scores and catch up on emails while simultaneously describing how to build a multi-threaded operating system.

# GRACE M. HOPPER

Instructors should model clothing students should expect to wear in their future careers as Computer Scientists. As an instructor, nothing says authority like a well-pressed uniform. In multiple studies, I have found that students check their email and text their friends 30% less during my lectures than with other COBOL instructors [6].

# REFERENCES

1. Bowman, M., Debray, S. K., and Peterson, L. L. 1993. Do I really need an iron? How instructor clothing choice impacts student learning. *ACM Trans. on Computing Education.* 15, 5 (Nov. 1993), 795-825. DOI= <http://doi.acm.org/10.1145/611892.611918>
2. Fröhlich, B. and Plate, J. 2000. Fashion choice and learning outcomes in a data structures course. In *Proceedings of the 44th technical symposium on Computer science education (SIGCSE '13)* (The Hague, The Netherlands, April 01 - 06, 2013). SIGCSE '13. ACM, New York, NY, 526-531. DOI= <http://doi.acm.org/10.1145/1028174.971323>
3. Sannella, M. J. 1994. *Clothes and the Computer Science Instructor*. Doctoral Thesis. UMI Order Number: UMI Order No. GAX95-09398., University of Washington.
4. More, C. T. 2003. Student performance on binary search tree questions. *J. Mach. Learn. Res.* 3 (Mar. 2003), 1289-1305.
5. Necklace, A., Hua, H., and Gao, C. 2003. Sensors and the student: How e-textiles can improve retention of operating system concepts. In *Proceedings of the 16th Annual ACM Symposium on User Interface Software and Technology* (Vancouver, Canada, November 02 - 05, 2003). UIST '03. ACM, New York, NY, 1-10. DOI= <http://doi.acm.org/10.1145/964696.964697>.
6. Hopper, G. M. 2006. A comparison of COBOL instructional techniques. *J. Syst. Softw.* 79, 5 (May. 2006), 577-590. DOI= <http://dx.doi.org/10.1016/j.jss.2005.05.030>.

Columns on Last Page Should Be Made As Close As Possible to Equal Length