What to Wear: Views on Attire for Teaching CS

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Keywords

Clothing; T-shirts; Wearable Computing; COBOL

1. 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.

2. 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.

3. ADA NECKLACE

As researcher on wearable computing, I believe it is important to integrate my research with my classroom teaching. Wearing

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DOI: 10.475/1234

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.

4. 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].

5. 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.

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