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Gregory V. Bard* (bardg@uwstout.edu), Dept. of Math., Stat., and Comp. Sci., Jarvis Hall, Science Wing, The University of Wisconsin—Stout, Menomonie, WI 54751. *Four Problems from Computer Engineering to Enhance Student Enthusiasm in the Discrete Mathematics Classroom.*

Discrete mathematics is of central importance to both computer science and computer engineering. Some of the topics are easy to motivate. The applications of truth tables, binary/hexadecimal numbers, and graph theory to computing are easy to teach, and can enhance student enthusiasm—resulting in a more positive experience for both the student and the instructor. Similarly, modular arithmetic can be motivated by the RSA cipher of Rivest, Shamir, and Adleman.

In stark contrast to this, combinatorics is a major topic, yet most of the textbooks are very light on applications, focusing on problems that can only be described as bizarre. The speaker did his Bachelor's and first Master's Degree in Computer Engineering, and worked in industry prior to getting a second Master's and PhD in Applied Mathematics. The speaker will present four particular sample problems (for two minutes each) that are highly realistic and applied, that can bring a breath of fresh air, as well as a sense of purpose, to the combinatorics chapter. (Received September 18, 2016)