Computational Projects in Introductory Physics GABRIELA POPA, Ohio Univ — Describing different kinds of motion with real measured data is a difficult task for first year students taking introductory physics classes. Performing experiments and plotting the position versus time, and then the velocity versus time graphs is not enough to solidify the understanding of motion. Few classes later, students can not find the solution to problems involving linear motion. The introduction of simple computational projects, where students have to think in terms of variables, and have the possibility to play with these variables and make up different situations, allows the students to improve their perception of motion. Also varying the fitting parameters helps students understand uncertainties and the effect of measurement uncertainties on the calculated value. I will present examples of computational projects for linear motion with and without resistance.

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