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The Intro to Linear Algebra at Long Beach State is traditionally populated with math and computer science majors. Recently, we have observed an increasing number of students from other disciplines partake in the course. These students are motivated by the intention to advance their collective knowledge in math through the learning of linear algebra. Inevitably, we are witnessing a pressing need to deliver innovative instructions that promote understandings of intellectually challenging concepts to a diverse audience. In this presentation, we will share a few image processing techniques that can be used in linear algebra instruction to illustrate difficult concepts such as vector subspace and orthogonal projection. In particular, we frontload the lessons with practical use of linear algebra ideas to increase students' interest level and offer a reference system for abstract concepts. This application-first, theory-second approach was shown to be effective in consolidating mental images and generating big pictures of difficult concepts. A favorable reaction was revealed by a mid-semester survey. Albeit a slight initial resistance, students were comfortable using some of the techniques learned in the class in solving real-life problems in the end-of-semester poster presentation. (Received July 27, 2009)