1135-C1-503 **Naima Naheed*** (`naheedn@benedict.edu`), Naima Naheed, 1600 Harden St., Columbia, SC 29204. *Linear Algebra in Digital World.*

The aim of this presentation is to show the application of Linear algebra in Computer Graphics. Everyone is familiar with the tremendous popularity of animated movies such as Toy Story or Shrek. Similarly 3D computer games has acquired a large place in everyone's mind. It looks like 3D entertainment sounds like more fun than studying a linear algebra book. As mathematicians, we have to remind our students that because of linear algebra those movies and games are brought to TV or computer Screen. When we see a character move on the screen, it is animated using some equation straight out of Linear Algebra. In this sense, Linear Algebra is a driving force of our new digital world. In my presentation, I want to share with you how I introduce local and global coordinates, their conversion and importance. Then Bezier curves comes next. Bezier curves were first developed by automobile designers to describe the shape of exterior car panels. It is a smooth curve with only few points to reduce the storage requirements. Application of Linear Algebra on these curves makes it more amenable to computerization. (Received September 18, 2017)