



Motion Capture Software: Exploring Applications

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My summer research experience was far from a linear journey. I began the summer with no idea of what it meant to be an “undergraduate research assistant”, and immediately jumped at the first idea my supervising professor suggested: working on adding conversational behaviors into a model of Reading Terminal Market. I spent most of my summer working on representing these behaviors. I read plenty of texts on different conversational types and parametrized behavior trees in efforts to create behavioral trees of my own to incorporate into the model, and I traveled to the market with a trio of my summer colleagues to collect observations of the body language of persons in conversation and assisted my colleagues in collecting data for their projects, which focused on how sound works in the market. When it came time to begin working on the code, however, I lost my passion. Scanning through the large project files and trying to digest the code and what it meant was a tedious process. It was incredibly frustrating for me and not very rewarding.

With just a couple of weeks remaining in the summer, I contacted my supervisor and explained to him how I discovered the project was not well suited for my interests and skills. He was very understanding of this, and helped me to redirect my focus to a field I found much more exciting—motion capture! As an athlete, I really enjoyed exploring the ways motion capture is being used to analyze small details that improve sports performance, and doing some experimenting with the motion capture suit and software available in the SIG Center. In the future, I plan to continue to work with motion capture technology and potentially incorporate it into my senior design project—discovering new ways to use the technology we have available.

This project really helped reawaken my interest in the computer graphics field, and it reminded me of how graphics can be incredibly useful outside of the realm of cinema and video gaming. I discovered a new interest and developed skills to pursue this interest throughout the remainder of my education and beyond.