Arthur Nishimoto, is graduate student at the University of Illinois at Chicago’s Electronic Visualization Laboratory. Arthur is no ordinary student, however, because he has developed a wall sized touch screen strategy game called Fleet Commander which is based on the Star Wars story. In the game multiple players are separated into two teams that take control of X-wings, TIE fighters and Death Stars, all with a touch of their fingers. Arthur has been in the news a lot lately so I thought I’d better interview him now before he’s too important for me. This is a visionary student that will seize technology to make a more interesting future so keep your eyes on him.

Peter: How did you come up with the idea for Fleet Commander and why did you want it to be on a huge touch screen?

Arthur: The basic idea for Fleet Commander was one of several game ideas I had come up with while taking Dr. Jason Leigh’s video game design course during spring 2009. For that class, we were in groups of four and had ten weeks to develop a game from scratch for a multi-touch table built by the Electronic Visualization Lab (EVL) called TacTile. We ultimately decided to make a foosballs game for that class. After the class ended, I was hired as an undergraduate researcher at EVL by Dr. Leigh to continue exploring multi-touch interfaces.

I wanted to see what kinds of gestures and interfaces could be better suited for gaming on a multi-touch table. What began as a simple widget you could drag and rotate around eventually grew into Fleet Commander. When EVL had setup a touch overlay to go over the existing 20-foot LCD wall, I figured why not port Fleet Commander from TacTile's 1920x1080 resolution to the wall's 8160x2304.
Peter: How long did it take you to program a game like this?

Arthur: The bulk of the programming took about six months, although I've been working on and off since summer of 2009.

Peter: What programming language did you use to make it?

Arthur: Fleet Commander was created using Processing (http://processing.org/), an open source programming language based on Java.

Peter: How did you get your school to invest in the huge touch screen, or did they already have it?

Arthur: EVL has a history of building large tiled wall displays and exploring interaction techniques in a large display environment. Since my primary research work revolves around multi-touch, when the lab decided to buy a 20-foot wide multi-touch overlay from PQ Labs, I was heavily involved with testing and debugging the overlay since this was the largest touch screen PQ Labs had ever produced.

Peter: Besides school, was there someplace else you learned how to program?

Arthur: While I knew some programming in Basic prior to attending college, most of what I learned was at UIC.

Peter: Where do you see the future of gaming in 5 years and beyond?

Arthur: I think it’s amazing to look at how gaming has become more interactive these past years. Going from buttons and analog sticks; to Wii, Move, and Kinect. With Sony adding 3D, Microsoft with hand-free tracking and speech recognition, and the Wii U extending the gaming experience beyond the TV screen I think gaming will continue to move toward a virtual reality-like environment.

Peter: Do you ever envision a day where we’ll have technology similar to the holodeck on Star Trek?

Arthur: Technology like the CAVE, lifelike avatars, 3D movies, and gaming is continually moving us toward something that one day could be as immersive and interactive as a holodeck.

Peter: I’m glad we have people like you to make it happen!

More info; YouTube video of Fleet Commander: tabletop version and wall version.

Interview conducted by Peter Marino, the Chief Science Officer and founder of SwarmKnowledge.com. He’s also a web designer, online marketer and freelance writer on many topics. You can follow Peter @ www.facebook.com/PeterMarinoShares on Twitter @reelWebDesign and on his personal science blog www.SwarmKnowledge.com.