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This edX course is based on the class EE319K, Introduction to Embedded Systems, taught here at the University of Texas at Austin. Our face-to-face students also build a 80s-style game for their last project. The following video shows some of the games built by our freshman in Fall 2013. The display is bigger and has more colors, but the educational objectives of both classes are the same.

The following video represents range of games possible, but does not reflect the details of this Lab. Some of these games were compiled with the full version of Keil. For more information on EE319K see <http://users.ece.utexas.edu/~valvano/Volume1/> (<http://users.ece.utexas.edu/~valvano/Volume1/>)

EE319K SUPERFINALS



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DR JONATHAN VALVANO: EE319K, super-final.

First contestants are Frogger.

STUDENT: This is Frogger-- we didn't probably hear that as much as we would have with the sound on.

DR JONATHAN VALVANO: Here we go.

STUDENT: And then we could distinguish each of these rows.

So within our code--

DR JONATHAN VALVANO: Woo hoo!

STUDENT: Within our code we have all of these rows labeled.

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And we have the y-axis labeled, so that we

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And you can see the collision detection with the frog and the cars.

It's pretty accurate, you can get within one pixel of the car and not get hit.

One of the challenges we face, Dr. Yerraballi, I'll switch off with him and he can talk a little bit about how he designed

the sprites and the collision detection system.

DR JONATHAN VALVANO: And so we have, basically, a code audio.

And then we use a larger bread board for all the input/output systems.

And then we found this--

STUDENT: Khaos, OK.

STUDENT: BME is hard and double E is easy.

SPRING 2014 SUPERFINALS



PROFESSOR JONATHAN VALVANO: Our first game is called Nyquest.

PROFESSOR RAMESH YERRABALLI:: This is our first game.

STUDENT: Yes.

So this game is called Nyquest.

Basically, it's about following a wave.

And so there are multiple game modes and you can actually

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