

Josh

Robotic competitions
Balloon bridges - Engineering design process
AI in scratch
Photogates with balloon cars
WiiMote bowling

Dustin

Data loggers
Kinect in Scratch
Breaking point testing
Overall Design with Lego NXT
Using Konza Prairie data for data points
Barbie bungee jump with camera

Joe

WiiMotes with sensor bar – Simple Harmonic Motion (SHM), circular motion
Geocache revised
Vernier lab – Speed of sound, calculating amplitude of sound waves and beats
Scratch – Exploration (let students play around), invention, application

Cheney

Introduction to Scratch
Advanced Scratch application
Graphing with Kinect
Using Arduino in Scratch
Kinematics
Bejeweled game for combining elements
How to draw trees presentation
Cyber-Physical Systems
GK12 proximeter and heartbeat monitors
Kanza Praire data
Geocaching balloon bridges

James

Scratch tutorial
Kinect applications
NXT robots – programming in Enchanting, drawing geometric shapes
Geocaching
Pnut rockets
Birdhouse cameras
Speakers

Zac

Lasers prisms with sensors – Security maze design
Wind, soil, light sensors related to plant growth
Heartbeat monitors, etc. and exercise
AR Kinect sandbox
Lego NXT – drawing shapes, following paths, creating basic AI
Catapults, scratch, and sensors
School fun night, mini-golf course, Rube Goldberg machine – sensors, WiiMotes, RC cars, etc.

Scratch programming – atoms, music, ecosystems, and more
Wii balance board with head tracking in PhysicsCraft
Liquid hydrogen and super conductors
Non-Newtonian fluids (phases of matter)

Andy

Kinect math – graphs, prime numbers, etc.
Geocaching
Introduction to Scratch
Introduction Lego NXT Enchanting programming
Catapult
Arduino programming

Nick

AR Kinect sandbox
Oculus Rift – virtual primes
Scratch and Arduino programming
Squishy circuits
Electro biography – Reading brain waves – Simulate a polygraph machine
Virtual experiments in Scratch
Raspberry Pi and decomposition
Game development tutorials