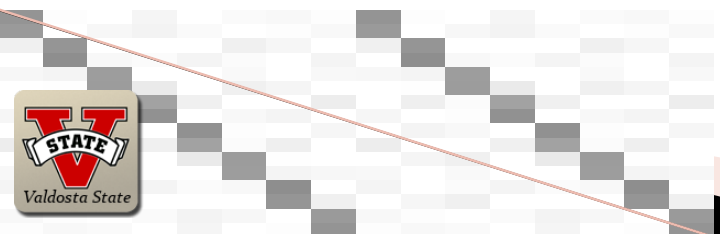


# Sharing Our Work – Computing for All

*Krishnendu Roy*  
Valdosta State University  
`kroy@valdosta.edu`

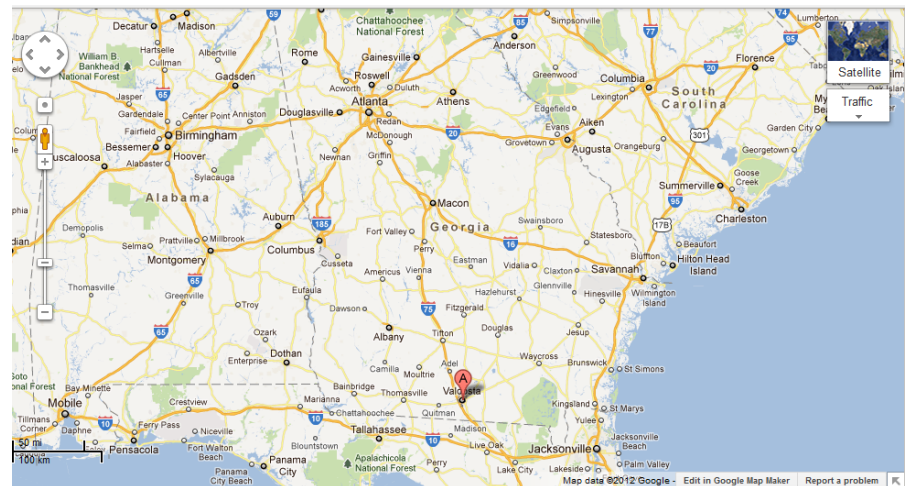
# Outline

- Our background
- Our outreach efforts
  - Camps
  - CS4HS
- Questions



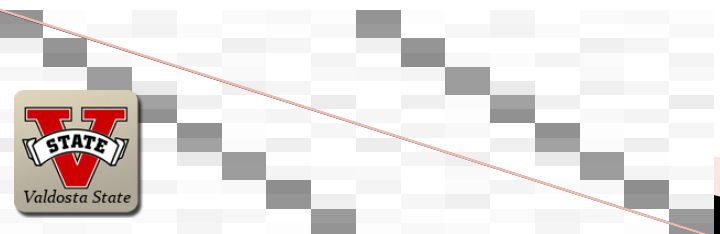
# Who/What

- Valdosta State University
  - Regional university under USG
  - ≈ 15K students
- Valdosta, GA
  - ≈ Population: 55K
  - Primarily rural
  - Poverty rate 18%



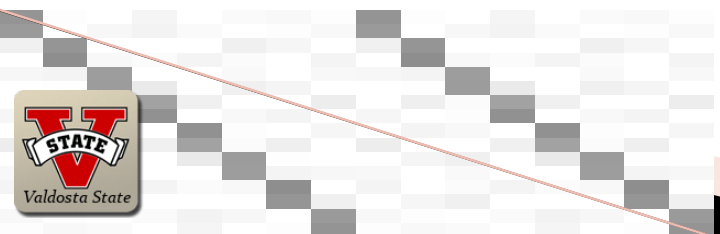
# Type of Outreach

- Summer camps
- CS4HS workshop



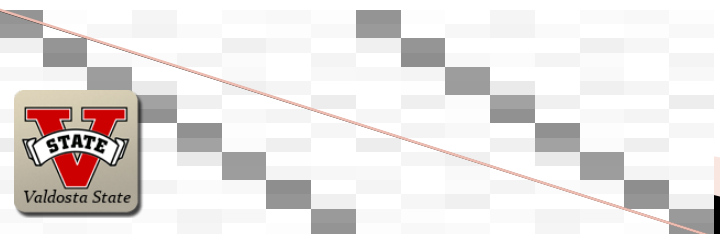
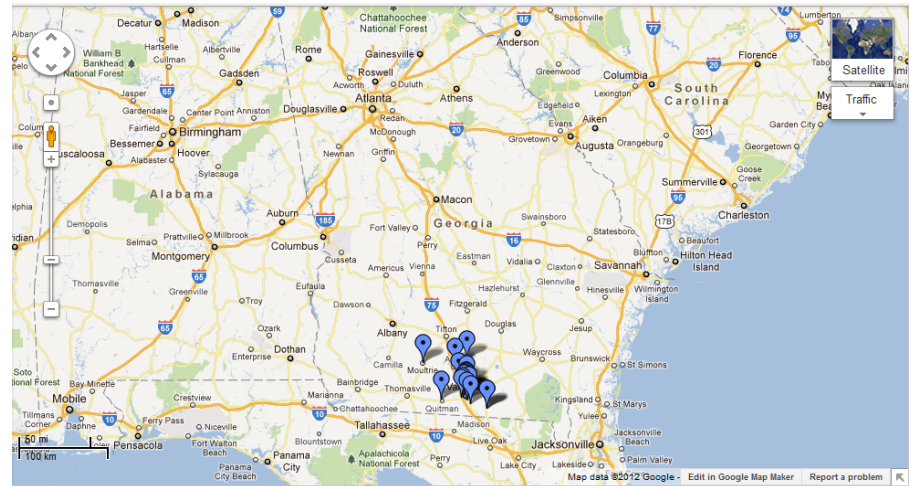
# Why use AIA?

- Best of both worlds
  - Ease of Scratch/Alice
  - A mobile device – the target
- Good recruiting tool
- Offered something different
- Smartphone usage among teens



# Computing Adventures @ VSU

- 3/4 Summer camps in June/July
- Seed fund from “*Georgia Computes*”
- Roughly 20 campers/camp
  - Scratch
  - Picocricket
  - Lego NXT
  - Alice
  - AIA



# Instructional Material

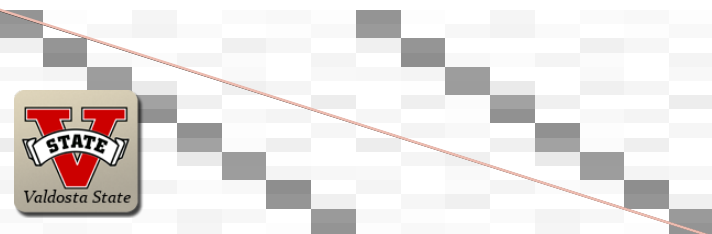
- Created 7 tutorials and posted as [YouTube](#)

Tutorial	Concepts
Basic drum set	C1: Sequence C2: Event-driven programming
Advanced Drum Set	C3: Boolean values
Basic Pong Game	C4: Random number C5: if-then-else C6: Boolean conditions
Keeping score in pong	C7: Variables C8: Init. and inc. of variables C9: Data type conversion
Baby catch game	C10: Procedures/methods
Xylophone	C11: Arrays
Shopping list	C12: Database/Persistent data



# Student projects

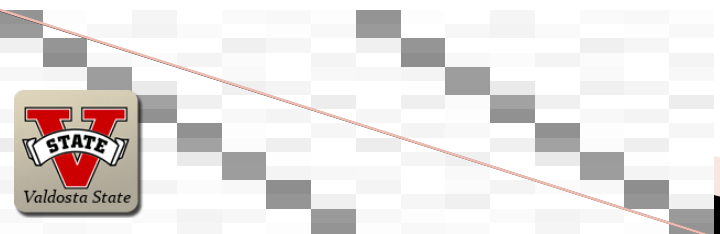
	Apps
App 1	Animal Friends
App 3	Tekno Blocks
App 4	Banana Blast
App 5	Tennis
App 5	On The Farm
App 6	Button Click
App 7	Light Saber
App 8	Hold Your Breath
App 9	Shooting Game
App 10	Big Piano





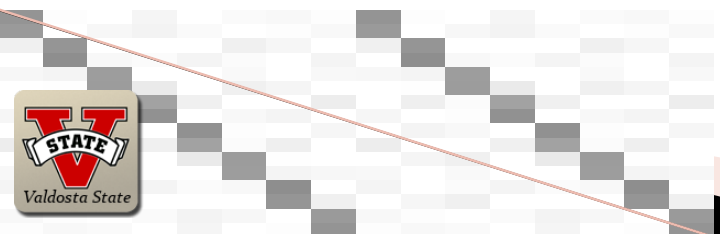
# Our impression: What works

- Appeal to youth
- Creations are more “real”
  - Best of Scratch and Lego NXT
- Transitioning in easy if you know Scratch
- Potential for transitioning-out



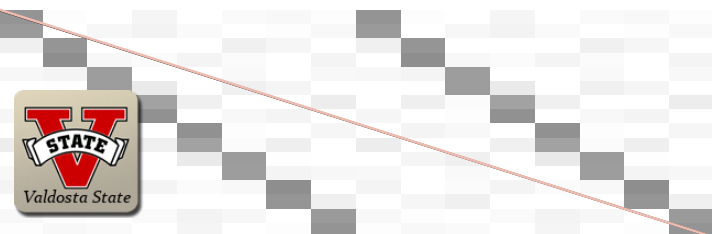
# Our Impression – Need improvement

- Media library like Scratch and in built editor
- Making device selection easier
- Interface
  - Difficult to use on the road
- Code-sharing and App-sharing
- Faster connection between browser/blocks editor/emulator



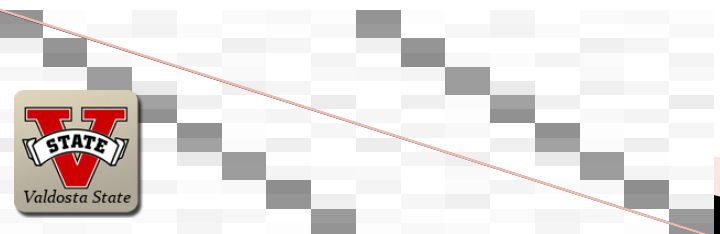
# CS4HS workshop

- One week long
- Just four teachers
- Work on AIA and Lego NXT
- Teachers are going to help us teach during camps



# Thoughts from CS4HS

- Availability of fully thrashed out curriculum
- Concerns with Android tablet
- Teachers with Scratch background did better
- Looking for more similarity between tools
- Isolation



# Questions

