Sharing Our Work – Computing for All

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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
  - Picocrickeet
  - Lego NXT
  - Alice
  - AIA
Created 7 tutorials and posted as [YouTube](https://www.youtube.com)

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<th>Concepts</th>
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<td>C1: Sequence</td>
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<td>C2: Event-driven programming</td>
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<td>Advanced Drum Set</td>
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<td>Basic Pong Game</td>
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<td>C5: if-then-else</td>
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<td>C6: Boolean conditions</td>
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<td>Keeping score in pong</td>
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<td>C8: Init. and inc. of variables</td>
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<td>C9: Data type conversion</td>
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<td>Baby catch game</td>
<td>C10: Procedures/methods</td>
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<td>Xylophone</td>
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<td>Shopping list</td>
<td>C12: Database/Persistent data</td>
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# Student projects

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<td>App 10</td>
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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