

# Web Automated Grading System

Appalachian State University



APPALACHIAN STATE UNIVERSITY  
COMPUTERSCIENCE

# CS Education

- Educational tools have been necessitated due to growth of Computer Science
- WAGS fills this gap by making learning more approachable and interactive for students

# What is Wags?

- Provides a repository of microlabs, each microlab demonstrating a particular concept
- Web application to provide quick and automatic feedback to students

# Demonstration

- Negative Positive Partition Logical and Magnet microlab
- Put all negative values on the left of the array. All positive to the right.

# Why was WAGS created?

- Created to meet the educational needs of both teachers and students
- Offers a creative alternative to conventional code-writing
- Uses colorful magnets in a drag-and-place environment to teach dozens of common coding skills with real-time feedback

# Where is it Being Used

- Ahmad Esmaili at Stony Brook University
- Lixin Fu at UNC Greensboro
- Appalachian State University

# The Teaching Process

- Provides an easy transition from abstract concepts to physical code
- Starts with logical microlabs to get student accustomed to thinking process, and then introduces drag-and-drop code lab

# Why use WAGS?

- Offers teachers a creation page, where they can make their own labs
- By uploading your own test classes, you can customise and build every lab to test and develop specific skill sets for your students



# Languages Supported

- Java
- Python
- C
- Prolog

# How we are working on it

- Created with Google Web Toolkit
- Headed and developed by undergraduate students working closely with teachers and professors

# What about the future?

- Currently undergoing a major overhaul, with plans to unveil new WAGS design in the near future
- New design should enhance ease of access and use as well as aesthetic appeal
- Bug Fixing!

# Acknowledgements

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