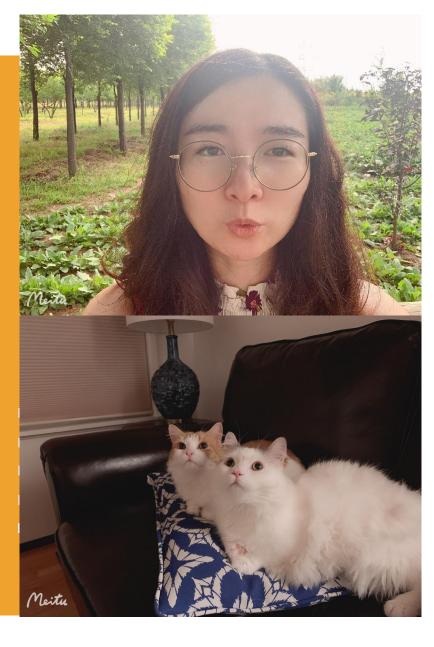
# Somerset Coding Club-Scratch Adventure! Course Introduction

2024-2025 Meng Yang



- Founder of Ms Yang Codecraft Academy
- Passionate teacher and advisor for over a decade
  - (high school) AP CSA, CS Special Topics,
     Coding in Python
  - (elementary school) Scratch Adventure!,Python Pioneers!
- AP Reader: AP CSA
- Lakeside Summer School CS Teacher
- Former Software Engineer & Program Manager
- Master in Computer Science and Software
   Engineering @UW Bothell with 2 years' teaching
- Two sons, age 9 year and 19 months
- One cat

# Why Scratch?

- **Easy to Learn**: Scratch uses visual, drag-and-drop blocks that make coding intuitive, even for beginners.
- Creative Expression: It empowers students to create their own games, animations, and stories, fostering creativity.
- **Problem-Solving**: Scratch helps students develop logical thinking and problem-solving skills through fun projects.
- **Build Computational Thinking**: By breaking problems down into steps, students learn the core concepts of computer science.
- Foundation for Future Coding: Scratch provides a strong base for transitioning to more advanced programming languages later.

## Curriculum

- Module 1: Scratch Basics
- Module 2: Mighty Loops
- Module 3: Fun with Coordinates
- Module 4: Game Design and Development
- Module 5: Parallel Coding
- Module 6: Final Project
- Bonus: Al-Based Scratch (RAISE)
- Bonus: Scratch Olympiad

### Al curriculum

- Image classification
- Text classification
- Natural language processing
- Reinforcement learning
- Music generation
- Affective computing
- Gesture recognition
- Social robotics
- Microcontroller robotics
- ...and more!

### Class Feature

- Project-based learning: Learn programming concepts through real-world examples and objects.
- Real-world applications: Connect coding to daily life, making it practical and relatable.
- **Collaboration**: Encourage teamwork and group activities to develop cooperation skills.
- Presentation skills: Practice project presentations to improve communication and public speaking.

## Calendar

### 14 sessions:

- Mondays 3:35-5:00pm
- 10/7/2024-2/10/2025
- Breaks: 11/11, 11/25, 1/20, 12/23, 12/30

# Student Teaching Assistants

Each class, we have 4-5 high-school volunteer TAs in the classroom

# THANKS! Q&A



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