# ANDREW VELLA

(917) 783-4759 | avella1@skidmore.edu | @AndrewJVella on Github

## **EDUCATION**

# Skidmore College | Saratoga Springs, NY

**Graduated March 2022** 

## **Bachelor of Arts in Computer Science**

Relevant Coursework: Operating Systems, Computer Networks, Computability, Linear Algebra, Computer Organization,
 Programming Languages, Computer Science I & II, Intro to Python and Data Science

#### **WORK EXPERIENCE**

#### THE CODING SPACE | Teacher | New York, NY

**November 2020 – April 2021** 

- Taught over 15 children ages 6 to 14 years (in smaller groups of 3 to 5 students) at The Coding Space, an afterschool and summer program offering elective courses in the fundamentals of computer programming.
- Authored two "un-tutorials" (projects at a specific level of difficulty with socratic guidance), designed for students to practice and develop newly learned skills during class activity. Topics included: Functions, Variables, Loops, Control flow
- Guided students in Scratch, Python, and WoofJS (a language for transitioning from Scratch to JavaScript).

#### MARYMOUNT SCHOOL OF NEW YORK | Teacher's Assistant | New York, NY

June 2021 - July 2021

- Teacher's Assistant for Advanced Drama III, a course geared toward preparing students for the stage.
- Supervised students ages 12 to 16 years; lead theater activities and improv games.
- Designed the playbill for the school production, *Into the Woods*.

### STAND UP AND LEARN | Volunteer | Nantucket, MA

March 2019

- Worked at a stand-up comedy workshop for children ages 8 to 15 years, with the goal of instilling confidence and public speaking skills in the students such that they could perform a routine on a stage, unaided.
- Assisted head instructor with supervising students and developing comedic routines in tandem with professional comedians.

#### Freelance | Tech Support Personnel | Long Island, NY

**Summer 2020** 

- Provided technical support for elderly neighbors during the Covid-19 pandemic.
- Assisted in setting up devices, navigating the Mac Operating System, installing software updates, guided user interface tours, setting up accounts, downloading apps, general troubleshooting.

# Brooklyn College | Guest Speaker | Brooklyn, NY

**Spring 2022** 

- Two-time guest speaker for Dr. Magdalena Oledzka's class, "Motor Development and Learning" at Brooklyn College.
- Spoke about my lived experiences and conducted Q&A.

#### Freelance | Dog Sitter | New York, NY

**Summer 2019** 

Cared for elderly dogs, including comfort, hygiene, and routine walks.

#### **PROJECTS**

KEYBIRD | Python 2022

- A minimalistic password manager written in Python.
- Generates sixteen character passwords using two user-selected keywords and a hashing algorithm.
- Passwords are stored locally and can be used for a variety of accounts.
- Designed to be simple to use, without tying users to a specific browser or profile.

#### BEDTIME LANGUAGE AND INTERPRETER | Java

2021

- Developed and implemented an Esoteric Programming Language, specified on the Esolangs Wiki.
- A language designed to interpret bedtime stories as computer programs.
- A repl is available to try the language out.

#### Novisc Video Game | C# / Unity

2023 - TBD

- This video game is early in development; I am currently finishing the sprite sheets and screen mockups so I can continue working
  on the project with finished graphics.
- The completed project will be a video game made with Unity, a *Galaga* style spaceship combat game for the fans of my childhood Scratch projects.

## **SKILLS & INTERESTS**

- Languages: Primarily Imperative, C Style Languages such as Java, Python, C#, Processing3, Scratch
- Esolang development. Developing languages for learning to code.
- Teaching programming fundamentals (to kids).
- Video game design and development, including music and sprite work.
- Bird-watching (see @littleglowingbirds on Instagram!)