SCHOLÉ ACADEMY

CLASSICAL ACADEMIC PRESS

Coding and Game Design Camp with Alice 3D Games and Stories (MS)

CLASS DATES & TIMES

Week of Aug 12-16

1:30-3:30 EST

Please download and prepare the following free software, Alice 2.6: https://www.alice.org/get-alice/alice-2/ (English Gallery Complete).

In this summer program, students will learn to make their own creative programs and games with Alice, a free programming software that helps them develop their creativity and logic while practicing the art of computer programming.

Alice is an innovative programming software that makes it easy to create 3D animations, build interactive stories, or program games. Alice includes a large library of familiar characters and objects that can be used in one's program. Alice is a great tool for learning logical and computational thinking skills and the fundamental principles of programming. There are characters and scenes with themes available that will interest students such as a space theme, tea party theme, sport theme, animal theme and more.

"Technology like art is a soaring exercise of the human imagination.

–Daniel Bell

Together we will learn various programming logic and techniques, and then students will be provided with the opportunity to try them on their own, provided with feedback and guidance so they can achieve their goals and objectives. By the end of the week, students will put all they have learned together and create their own interactive story or game to share with their family and friends. Whether one has taken a computer programming course or not, this camp will be a great experience. It will serve as a helpful springboard for those who may be interested in continuing to study programming in the future. One such opportunity would be the 2024-25 course offerings for The Logic of Computer Programming or The Art of Computer Programming.

Week Overview

DAY 1

1. Introduction to Alice User Interface
2. Introduce Objects: How to find, place, and modify objects in Alice
3. Set up scene with objects (props and characters)
4. Begin to introduce character dialog and movement

DAY 2

1. Introduction to Methods and Procedures
2. Use of Get Info and User Input

DAY 3

1. Functional Methods to for instance get distance and height of objects
2. Procedures
3. Writing Methods

DAY 4

1. Applying methods to other objects
2. Loops
3. Conditionals

DAY 5

1. Showcase story/game
2. Be provided with feedback and make improvements
3. Have completed story/game to share with family and friends

About the Instructor: **Peter Belfry** has a range of teaching and tutoring experience in a variety of subjects and age levels from kindergarten through to adult education at the college level and has taught at several classical, Christian and public schools. He has experience teaching computer programming from a Christian perspective to middle and high school students as well as designing a digital coding textbook for the grade 9 level. Currently, he serves as a professor of computer science with Canadore College, teaching courses on Operating Systems and programming languages such as Windows, Linux, HTML, C++ and Visual Basic. Peter holds an Honors BA from Trent University in History as well as a BA in Education, specializing in History and Computer Science. He holds an MA from Knox Theological Seminary in Classical and Christian studies, which provides him a background for teaching from a classical perspective. For his MA program, he read many of the Great Books as well as studied Scripture and church history. Peter has completed a week-long teacher training with the Association of Classical Christian Schools and Rockbridge Academy. His favourite piece of classical literature is Dante's *The Divine Comedy*.

In addition to teaching, Peter also has experience serving in a pastoral role and enjoys volunteering to serve in his local church and community. He helps in evangelistic outreach as well as teaching lessons from the Bible. Peter has experience and training as an English as a Second Language instructor as well. He has experience teaching both online and in person. He believes in Scholé's approach in seeking "restful learning" and believes that education should be life-giving and freeing for the soul as it should acknowledge the Lord Jesus as the source of all that is true, good and beautiful. Peter lives in the North Bay, Ontario area with his wife, twin boys and baby girl.

Peter provides tutoring services with Scholé Academy and teaches the following classes: *Formal Logic: The Discovery of Deduction*, *Informal Logic: The Art of Argument, The Logic of Computer Programming and the Art of Computer Programming*. Please contact Peter by his email: pbelfry.scholeacademy@gmail.com