Jomarie E. Pendon

BSIS 4B

PROFE8

Certification 2

Verifiable linked: <https://www.freecodecamp.org/certification/fcc441fc66c-4cb0-4d57-bf6f-b272ee14d3e2/scientific-computing-with-python-v7>

Scientific Computing with Python

Course Content:

● Learn String Manipulation by Building a Cipher

● Learn How to Work with Numbers and Strings by Implementing the Luhn Algorithm

● Learn Lambda Functions by Building an Expense Tracker

● Learn Python List Comprehension by Building a Case Converter Program

● Learn the Bisection Method by Finding the Square Root of a Number

● Learn Regular Expressions by Building a Password Generator

● Learn Algorithm Design by Building a Shortest Path Algorithm

● Learn Recursion by Solving the Tower of Hanoi Puzzle

● Learn Data Structures by Building the Merge Sort Algorithm

● Learn Classes and Objects by Building a Sudoku Solver

● Learn Tree Traversal by Building a Binary Search Tree

● Learn Special Methods by Building a Vector Space

● Learn Interfaces by Building an Equation Solver

● Learn Encapsulation by Building a Projectile Trajectory Calculator

Certification Projects

● Build an Arithmetic Formatter Project

● Build a Time Calculator Project

● Build a Budget App Project

● Build a Polygon Area Calculator Project

● Build a Probability Calculator Project

