CTY SUMMER PROGRAM FINAL EVALUATION

Student: Alec D. Rutledge Date: July 8, 2016

Course: Fundamentals of Computer Science Instructor: Chris Allulis

Site: Carlisle, PA Teaching Assistant: Arnoldas Kurbanovas

Overall Performance

Congratulations, Alec, on completing CTY’s Fundamentals of Computer Science. Over the past three weeks, you learned that Computer Science is not just about programming. We covered a wide range of topics including graph theory, algorithm design, data structures, digital logic, computer architecture, programming languages, operating systems, computer networking, graphics, and stabilization in distributed systems. Please see the enclosed course description for more detailed information on the course.

Content Proficiency

Your work in this course was adequate. You provided a thorough and correct definition for a directed and weighted graph. Generally, your work was done well. On your homework, you worked through many different topics. Overall, your test and quiz scores showed an excellent understanding of the materials presented in class. Despite your generally good efforts, you seemed to struggle with some of the more difficult programming challenges. You were reluctant to ask for assistance at time. In the future, I encourage you to seek assistance when stuck on a difficult problem.

Reasoning and Problem Solving

Computer Science is ultimately about solving a problem. You showed that you are entirely capable of solving complex problems and abstracting the solution to a computing system. Through the laboratory simulations, you demonstrated a solid understanding of the topics. In the lab, you implemented what you learned about number systems, sorting, algorithm analysis, and complex circuitry design with logic gates. Your best work included a mad-lib maker, a calculator, and a password generator. You also designed a “Rock-Paper-Scissors” game that demonstrated your analytical abilities.

Collaboration and Participation

The ability to work in a team-oriented environment is a highly valued skill in the software industry. Problem-solving is rarely completed through the efforts of one person. You collaborated fantastically with your group practicing the bubble sort algorithm and the insertion sort algorithm. You clearly demonstrated your ability to work through difficult and abstract problems. Your work with three other students on a slight inversion of Vigniere cipher was fantastic, and the presentation was highly engaging. Frequently, I saw you collaborating with other students around you to complete the more challenging problems. I encourage you to continue to work in teams to come to a better understanding of problems.

Suggestions and Recommendations

Ashley, it was a pleasure having you in the course. Shane and I both wish you the best of luck in all future endeavors.

Instructor’s Signature:

CTY SUMMER PROGRAM FINAL EVALUATION <<EASY>>

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Student: Sam Schickler Date: July 18, 2014

Course: Fundamentals of Computer Science Instructor: Chris Allulis

Site: Los Angeles, CA Teaching Assistant: Shane Drye

Overall Performance

Congratulations, Sam, on successfully completing CTY’s Fundamentals of Computer Science. In the last three weeks, you learned that Computer Science is not just about programming. We covered a wide range of topics including graph theory, algorithm design and analysis, data structures, digital logic, computer architecture, programming languages, operating systems, computer networking, and stabilization in distributed systems.

Content Proficiency

Your work in this course was stellar. You frequently asked relevant questions that were highly advanced and showed a clear understanding of the fundamental materials covered in the course. Your Python programming assignments demonstrated a thorough comprehension of all facets of programming. Your comments were an asset to the class. You made useful suggestions during the discussions on the design of digital circuits with logic gates. For example, when we were putting together circuits in the logic gate simulator, you were able to present a simplified logic gate circuit using an XOR gate and an NOR gate as an alternative to the solution presented. You also actively participated in working out examples of digital logic and algorithms. While your programs were almost always correct, they were sometimes a bit hard to follow. I encourage you to work on making your code easier to understand by including descriptive variable names, proper documentation, and a succinct flow.

Reasoning and Problem Solving

Computer Science is ultimately about solving a problem. You showed that you are entirely capable of solving complex problems and abstracting the solution to a computer system. Through the laboratory simulation experiments, you demonstrated a solid understanding of topics. Your best work included an interactive guessing game and a rock-paper-scissors-lizard-Spock project. Your programs for implementing a calculator, prime number sieve and the square number generator were efficient and elegant. Frequently, you were able to take assigned programs and find interesting ways to make them more user-friendly. For example, in your guessing game, you explored the Python API to find an interactive Tkinter mechanism that gave the user access to a drop-down list.

Collaboration and Participation

The ability to work in a team-oriented environment is a highly valued skill in the software industry. Problem-solving is rarely completed through the efforts of one person. You collaborated fantastically with your group practicing the bubble sort algorithm and the insertion sort algorithm. Your work with three other students on a Cryptography scheme involving the inversion of a matrix, and the presentation was highly engaging. You were able to master material quickly, after which you volunteered to work with other students individually to help them understand the material.

Suggestions and Recommendations

Sam, it was a pleasure having you in the course. Shane and I both wish you the best of luck in all future endeavors.

Instructor’s Signature: