# SKILL CERTIFICATE

### **CAREER AND TECHNICAL EDUCATION**

This is to certify that
JONATHAN
SU

has demonstrated competency in

Computer Programming, Advanced (840)

May 19, 2022



Sydnee Dickson
Sydnee Dickson
State Superintendent

Thalea Longhurst

Thalea Longhurst
State Career and Technical Education Director

## Career Skills Certificate Report



#### **Exam Details**

**JONATHAN SU** 

Computer Programming, Advanced (840)

Certification Date: 05/19/2022

This document certifies that the student listed has acquired the following skills and knowledge

### Skills and Knowledge

#### **Standards**

- Students will develop applications which make advanced use of the skills and concepts developed in Computer Programming 1 & 2.
- Students will use searching and sorting algorithms.
- Students will utilize multidimensional arrays.
- Students will properly employ dynamic data structures / abstract data types (ADTs).
- Students will design and implement advanced objected oriented concepts.
- Students will use Unified Modeling Language (UML) to design object oriented programs.
- Students will develop a program of significant complexity as part of a portfolio.