

# SKILL CERTIFICATE

## CAREER AND TECHNICAL EDUCATION

*This is to certify that*

**XUANTHAO  
TRAN**

*has demonstrated competency in*

**Computer Programming 2  
Python (827)**

05/19/2023

1896



Learning that works  
for Utah

*Sydnee Dickson*

Sydnee Dickson  
State Superintendent

*Thalea Longhurst*

Thalea Longhurst  
State Career and Technical Education Director

# Career Skills Certificate Report

## Exam Details

XUANTHAO TRAN

Computer Programming 2 Python (827)

Certification Date: 05/19/2023

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

## Skills and Knowledge

### Standards

- Students will demonstrate static (array), dynamic (vector, Arraylist, etc.) list structures, and strings.
- Students will properly use sequential files.
- Create user-defined functions using top-down design and functional decomposition.
- Students will properly demonstrate object-oriented programming techniques.
- Students will properly demonstrate code comprehension and debugging techniques.
- Students will apply appropriate programming skills as effective members of a team demonstrating the ability to collaborate with others ([www.p21.org](http://www.p21.org)).
- Students will be aware of career opportunities in the Computer Programming/Software Engineering industry and of its history.