



# CTE DIRECTIONS

December 2021

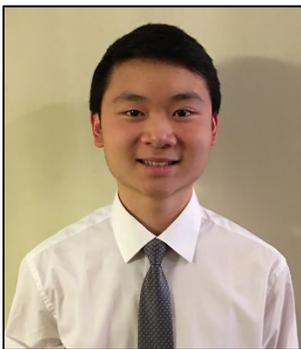
**Career and Technical Education provides all students access to high-quality, rigorous career-focused programs that result in attainment of credentials with labor market value.**

## 2021 U.S Presidential Scholars in CTE Nominees

Congratulations to Alan Mo, Angie De La Cruz, Christina Dong, Spencer Smart, and Tyler Larsen who have been nominated as 2022 U.S. Presidential Scholars in Career and Technical Education. All five nominees have been nominated for this high honor because of their academic accomplishments, their technical competence, the certifications they have earned, and for their ingenuity and creativity to solve problems.

The 2021 U.S. Presidential Scholars semifinalist will be announced in April and the finalists will be announced in May.

### Alan Mo



Alan Mo is a student at Skyline High School in Granite School District. His goal is to pursue a career in computer science. He has been coding since he was in the ninth grade. Because of his expertise, a software development company offered Alan an internship. “I collaborate with high-caliber university graduates in a professional environment. The internship experience solidified my resolution to pursue further studies in computer science,” said Alan.

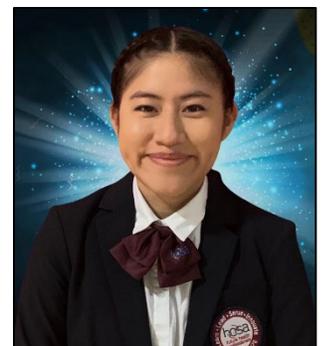
Last year, Alan’s coding skills entered the competitive arena. He helped his robotics team reach the VEX Robotics State competition. “I was familiar with spending hours hunched over tools, so I was in my element problem-solving and speaking our robot’s language, VEXcode, which is based on C++,” said Alan. Alan is in the process of building a robot capable of thriving in the challenges of this year’s VEX competition.

### Angie De La Cruz

Angie De La Cruz is a student at West High School in Salt Lake City School District. Her goal is to pursue a career as a pediatric physician. Angie has participated in several work-based learning and community experiences—from an internship at Comunidades Unidas, where she worked on the “Know Your Rights Campaign,” to volunteering at Maliheh Health Clinic.

For four years, Angie has dominated the HOSA Public Health Competition in state and national competitive events. The competition requires that students create and act out a scene that teaches a specific principle. Each year, Angie was successful in the competitions she competed in and consistently placed first.

A nominating teacher said, “Angie is always mindful of those around her and seems to make it her continuing goal to assure all people are treated with respect and dignity.”



## Christina Dong



Christina Dong is a student at Skyline High School in Granite School District. Her goal is to pursue a career in data analytics. Christina competed with a group of students in the Lassonde Entrepreneurship Challenge to develop the idea of SilkThread, a company meant to help bridge the gap between the lower and upper economic classes.

“I have been involved in a large number of clubs and extracurricular activities that span across many fields, from the arts to sports to STEM. Through this, I have had the opportunity to gain insight into a number of different fields and learn from many others more and less experienced than me. I have been able to gain experience in working, leadership, customer service, and personal relations/communications, which I can apply to the fields I am interested in,” said Christina.

## Spencer Smart

Spencer Smart is a student at American Fork High School in Alpine School District. His goal is to pursue a career as an information security analyst/engineer. Spencer developed a TRAP (Tactical Raspberry pi Access Point) proof-of-concept creation made of a WiFi access point and a specialized wireless network adapter hidden in a simple cardboard box.

Spencer is an intern at Horrocks Engineers, a civil engineering company. He has been trained in CAD design for fiber optics, which includes creating splice details, plan sets, and asbuilts for several multimillion dollar CARES Act (Coronavirus Aid, Relief, and Economic Security) fiber optic projects.

Not only was Spencer TSA president of his high school chapter, but he was the president of iTeam and the captain of his CyberPatriot Team. Spencer organized, ran, and hosted a statewide Cybersecurity CTF (Capture the Flag) Competition in 2021. Students could participate remotely, individually, or as a team. There were over 75 participants in the week-long competition.



## Tyler Larsen



Tyler Larsen is a student at Salem High School in Nebo School District. His goal is to pursue a career as a computer engineer. Tyler is participating in an internship with Skill Struck, a business that focuses on a K-12 program to make computer science engaging and accessible to all students.

Tyler successfully accomplished several computer engineering projects including creating a website for a photographer, writing the front-end code for a time clock Web app, and designing and building a winch arm for a robotics competition.

Tyler attributes his success to his CTE teachers and counselors who guided him along the path toward a career as a computer engineer. “I am so grateful I was exposed to the wonderful study and real-world application opportunities provided by CTE. I have been changed forever by the advice of wonderful CTE teachers and counselors,” said Tyler.

## Calendar:

**December 2:** [Utah State Board of Education](#) Meeting – 250 East 500 South – Salt Lake City, UT

**December 9:** [Utah State Charter School Board](#) Meeting – 250 East 500 South – Salt Lake City, UT

[Utah CTE Calendar](#) | [ACTE Calendar](#)



Utah CTE classes are open to all qualified students without regard to race, color, national origin, sex, disability, or age.

Utah State Board of Education | Career and Technical Education  
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