Course resumes showcase the technical skills students obtain in each PLTW course. Each resume outlines the computational skills, analytical skills, and knowledge acquired in the course. Course resumes also detail student experience with tools, software, lab work, and engineering design. The detailed skills listed within course resumes illustrate the immediate, applicable contributions that students can make within a workplace.

Program Design and Development
- Create programs using procedural, event-driven, and object-oriented programming (OOP) paradigms
- Design a user interface (UI) based on human-computer interaction (HCI) principles
- Debug and test code
- Create annotated programs with in-code commenting and documentation

Web Development
- Explain how client-side code, server-side code, and databases are used together to implement a website

Interpretation of Documentation
- Use application programming interfaces (APIs)
- Data Analysis and Visualizations
- Use and create software to display charts and graphs
- Analyze large data sets through computational techniques
- Use coding to automate data analysis
- Interpret data visualizations

Modeling and Simulation
- Create simulations using agent-based simulation software
- Use agent-based simulations to observe emergent behaviors
- Describe any limits to the predictive power of a given simulation

Programming Languages
- *Python*®
- Scratch
- MIT App Inventor
- PHP
- MySQL™
- HTML/CSS/JavaScript™
- NetLogo

Tools and Software
- Full-featured integrated development environment (Enthought Canopy for *Python*)
- Git and GitHub
- Microsoft® Excel®
- Linux® Environment and Bash

Professional Skills
- Pair Programming
- Agile Project Development/Scrum
- Teamwork and Collaboration
- Presentation/Communication
- Public Speaking
- Ethics
- Cybersecurity Best Practices