

Computer Science & Informational Technology Resources

ADVOCATES FOR COMPUTER SCIENCE/INFORMATIONAL TECHNOLOGY

Black Girls Code – <http://www.blackgirlscode.com>

The Black Girls Code mission: to introduce programming and technology to a new generation of coders, coders who will become builders of technological innovation and their own futures.

Code.org – <https://code.org>

Code.org is a non-profit dedicated to growing computer programming education. Their vision is that every student in every school has the opportunity to learn how to code. They believe computer science and computer programming should be part of the core curriculum in education, alongside other science, technology, engineering, and mathematics (STEM) courses, such as biology, physics, chemistry and algebra.

Computer Science Teachers Association – <https://sites.google.com/view/csta-mn/home>
Gopher State Chapter (MN)

The Computer Science Teachers Association is a membership organization that supports and promotes the teaching of computer science and other computing disciplines. CSTA provides opportunities for K-12 teachers and students to better understand the computing disciplines and to more successfully prepare themselves to teach and learn.

Girls Who Code – <https://girlswhocode.com>

Girls Who Code programs work to inspire, educate, and equip girls with the computing skills to pursue 21st century opportunities.

National Center for Women & Information Technology (NCWIT) – <https://ncwit.org>

The National Center for Women & Information Technology is a non-profit community of more than 575 universities, companies, non-profits, and government organizations nationwide working to increase women's participation in computing and technology.

IT WORKFORCE INITIATIVES

Minnesota PIPELINE Project – <http://www.dli.mn.gov/pipeline>

PIPELINE (Private Investment, Public Education, Labor and Industry Experience) is designed to move the focus outside of traditional apprenticeship industries to new areas of economic demand and potential growth. The goal is to develop a path for individuals to obtain a degree and career. Plus, allow employers to obtain highly-trained workers in needed areas.

Minneapolis TechHire Initiative – <http://www.minneapolismn.gov/cped/metp/TechHire>

City of Minneapolis Employment and Training and the Minnesota High Tech Association will develop coding bootcamps with input from tech employers to ensure the training meets current and future industry needs.

K-12 COMPUTER OR CODING PROGRAM PROVIDERS

BDPA (Black Data Processing Associates) – <https://www.bdpa.org>

BDPA is a non-profit organization of professionals working in or having an interest in the Computer Science and Information Technology fields. BDPA provides coding classes to high school students of all ethnicities.

Code Savvy – <https://codesavvy.org>

Code Savvy is a non-profit inspiring kids and teens to understand the kind of creative thinking that goes into coding, and to try out programming computers and devices. Code Savvy is determined to bring more diversity--gender and ethnic diversity – to computer science.

CoderDojo Twin Cities – <https://coderdojotc.org>

CoderDojo is a global movement about providing free and open learning to youth, with emphasis on computer programming. The Twin Cities chapter brings this movement to the metro area and partners with other organizations to better introduce kids to coding.

Digital Empowerment Academy – <https://www.digitalempowermentacademy.org>

The Digital Empowerment Academy is a digital literacy initiative in Minneapolis that works to enable youth to become savvy creators of digital content.

Project Scientist – <https://projectscientist.com>

Project Scientist is the leading summer STEM academy for girls, offering tailored science, technology, engineering, and math (STEM) curriculum for girls ages 4 to 12 on university campuses.

Rêve Academy – <https://reveacademy.org>

Reve Academy, is an innovative out-of-school program focused on providing a pathway to careers in digital marketing. The program couples immersive curriculum with relevant experience to create marketable talent. It is founded on the belief that it is our kids who can lead us into the future.

SPARCS for Young Women in IT – <https://mnstateitcoe.org/sparcs-for-young-women-in-it/>

SPARCS is a youth technology development program for female high school students in Minnesota. SPARCS is designed to help students increase awareness and understanding of information technology (IT) career opportunities

Technovation[MN] – <https://technovationmn.org>

Technovation[MN] wants to inspire and enable Minnesota teen girls to dream up, design, code and pitch mobile phone apps. Technovation[MN] hosts the MN Technovation Challenge, several Apps Days, and MN Appalooza event.

IT WORKFORCE PROGRAM PROVIDERS

Advance IT Minnesota – <https://mnstateitcoe.org>

Advance IT Minnesota works to increase the size and quality of the Minnesota IT workforce by promoting IT career interest and readiness among secondary students, leading collaborative efforts with employers and educators aimed at improving alignment of student learning outcomes with the needs and expectations of IT employers, and enhancing career success of students and alumni by providing career development opportunities.

Creating IT Futures – <https://creatingitfutures.org>

As the 501 (c)(3) philanthropic arm of Comp TIA (non-profit trade association of the IT industry), the Creating IT Futures Foundation invents better on-ramps to IT careers for those who are lacking job opportunity. They particularly encourage an IT path for populations that have traditionally have been under-represented in the information technology workforce, such as women and ethnic minorities.

Genesis 10 – <https://www.genesis10.com>

Genesis10 helps companies develop their next-generation workforce by recruiting, training and mentoring U.S. military veterans and recent college graduates.

Maverick Software Consulting – <https://www.mavericksoftware.com>

Maverick Software Consulting is a first-of-its-kind program that brings together top computer science students in the U.S. with corporations seeking U.S.-based software development and testing talent.

HARDWARE PROVIDERS

PCs for People – <https://www.pcsforpeople.org>

PCs for People is attempting to improve digital inclusion by eliminating the number of individuals without a computer or access to internet in the home. As a 501 (c)(3) non-profit organization, their mission is to create new opportunities by providing affordable personal computers, computer repairs, internet service, and education to people with limited technological experience due to social, physical, or economic circumstances.

Tech Dump – <https://www.techdump.org/shop-refurbished-electronics-at-tech-discounts/>

Tech Dump, a division of Jobs Foundation, is a 501 (c)(3) nonprofit providing stable jobs to economically disadvantaged adults to obtain marketable job skills as well as a pathway to self-sufficiency. Tech Dump offers quality used desktops and laptops at great prices. Tech Dump refurbishes computers in Minnesota. All of their refurbished items are covered by a 30-day money back guarantee.

STEM Education and Workforce Resources

MHTA PROGRAMS

getSTEM – <https://getstem-mn.com>

getSTEM is a web portal designed to connect Minnesota educators with science and technology businesses, in order to better prepare students for post-secondary education programs and careers in science, technology, engineering, and mathematics (STEM). The STEM Ambassadors page is a dedicated space on getSTEM that lists STEM professional who are interested in more directly volunteering in a variety of ways.

SciTechsperience – <https://scitechmn.org>

SciTechsperience is the internship program that connects college students studying science, technology engineering and mathematics (STEM) disciplines to paid internships in small to mid-sized Minnesota companies. Companies receive assistance finding qualified candidates and a \$1:\$1 matching grant to cover 50% of the intern's wages (capped at \$2,500) when they hire a student through SciTechsperience.

ADVOCATES FOR STEM EDUCATION

Minnesota STEM Network – <https://www.scimathmn.org/mnstemnet/>

The MN STEM Network strengthens collaborations among business, education, community, and civic leaders to increase the appeal of STEM and communicate its importance to Minnesota's future; promotes opportunities for students and their families to engage in high-quality STEM experiences; and fosters continuous improvements in STEM teaching and learning.

MN Compass - STEM Overview – <https://www.mncompass.org/education/stem/overview>

MN Compass provides STEM education, data, research, and resources to support people in STEM and address disparities.

National Academy of Engineering – <http://engineeringmessages.org>

The goal of this website is to promote broad implementation by the engineering community of the findings and recommendations presented in the 2008 NAE report, *Changing the Conversation: Messages for Improving Public Understanding of Engineering*.

SciMathMN – <https://www.scimathmn.org>

SciMathMN is a non-profit, statewide education and business coalition advocating for quality PreK-16 science, technology, engineering and mathematics education base on research, national standards and effective practices.

STEMconnector – <https://www.stemconnector.com>

STEMconnector is “The one-stop for STEM Information.” STEMconnector works closely with corporations and other organizations to provide them with a set of tools and resources that support their corporate development, corporate structure and smart STEM Investments.

STEM WORKFORCE PROGRAM PROVIDERS

Best Prep – <https://bestprep.org>

BestPrep is a statewide nonprofit organization with a mission to prepare students with business, career and financial literacy skills through hands-on experiences that inspire success in work and life.

Genesys Works – <https://genesysworks.org>

Genesys Works is a 501 (c)(3) not-for-profit organization that enables inner-city high school students to break through barriers and discover through meaningful work experience that they can succeed as professionals in the corporate world.

Right Track – <https://righttrack.stpaul.gov/>

Right Track is Saint Paul's pipeline for youth career development and building a diverse future workforce. Right Track brings together the City of Saint Paul, Saint Paul Public Schools, local businesses, and community-based organizations to provide employment opportunities and professional skills training for youth.

STEP-UP Achieve – <https://www.achievempls.org/stepup>

STEP-UP Achieve is the nationally-recognized City of Minneapolis summer jobs program for youth ages 16-21. STEP-UP Achieve recruits, trains, and places low-income Minneapolis youth with diverse skills and interests in jobs with top Twin Cities businesses.

STEM PROGRAMS

High Tech Kids – <https://hightechkids.org>

High Tech Kids is a nonprofit that supports the Minnesota Renewable Energy Challenge, Minnesota FIRST LEGO League, and Minnesota FIRST Tech Challenge each fall/winter.

Leonardo's Basement – <https://leonardosbasement.org>

Leonardo's Basement provides year-round, inventive workshop classes to help people of all backgrounds and ages apply the powers of imagination, curiosity, problem solving, and risk taking to create engineering, art, and technology projects.

Master's in Data Science – <http://www.mastersindatascience.org/schools/minnesota/> Programs in Minnesota

A short guide to earning an Minnesota data science degree. The guide has details on everything from research & scholarships to startups & salary numbers. Also includes access to a list of all the data science programs in Minnesota.

Math Masters – <http://www.mathmastersmn.org>

Math competitions for individuals and teams. The program challenges 5th & 6th grade students to use critical thinking skills and problem-solving abilities in mathematics, while recognizing academic effort and achievement.

Minnesota Academy of Science – <https://www.mnmas.org>

The Minnesota Academy of Science is a statewide organization committed to promoting interest in and appreciation of science.

Minnesota Destination ImagiNation – <https://mndi.org>

Teams of up to seven members solve one of six different Challenges, which they perform in front of appraisers at tournaments. Challenges involve unique hands-on experiences in the sciences, technology, mechanics, engineering, theater, improvisation, goal setting, time and budget management, team building, and leadership.

Sparticl – <https://www.sparticl.org>

Sparticl is a new web and mobile service for teens, a collection of the very best the web has to offer in science, technology, engineering, and math (STEM). Sparticl includes answers to science questions, images, videos, games, and hands-on activities, all curated by a team of experts.

STEM MUSEUMS & CENTERS

The Bakken Museum – <https://thebakken.org>

A one-of-a-kind museum exploring the mysteries of our electrical world. Inspiring a passion for science and its potential for social good by helping people explore and appreciate the history and nature of electricity and magnetism.

Bell Museum of Natural History – <https://www.bellmuseum.umn.edu>

Through lively tours, classroom offerings, professional development and educational tools developed by University faculty and museum curators, the Bell helps teachers to inspire student interest in Science, Technology, Engineering, and Math (STEM) disciplines.

Minnesota Zoo – <https://mnzoo.org>

Cutting-edge exhibits provide exciting experiences with animals and their habitats introducing guests to species from around the globe. Education programs engage audiences at the Zoo, throughout the region, and around world. Conservation programs protect endangered species and preserve critical ecosystems.

Science Museum of Minnesota – <https://www.smm.org>

The Science Museum of Minnesota is known worldwide for its interactive exhibits and dynamic traveling exhibitions. The museum provides innovative staff development programs for teachers throughout the region and science education outreach programs for K-12 classrooms.

The Works Museum – <https://theworks.org>

The Work's mission is to inspire the next generation of innovators, engineers, and creative problem solvers. Their exhibits, programs, and design challenges engage kids in science, technology, and engineering and make learning memorable and fun.