SOFTWARE / IT
in New York's Capital Region

CENTER for ECONOMIC GROWTH

The Capital Region's Software-IT Cluster includes some of the nation's most advanced software R&D firms and computer science research centers. Among New York's 10 economic development regions, the Capital Region has the second most computer programmer and computer systems analyst jobs and the fourth most software developers and software quality assurance analyst jobs. Supporting this vast workforce is a talent pipeline that includes 13 colleges and universities that annually award more than 1,000 degrees in computer and IT sciences. Local colleges and universities also annually spend more than $15 million on computer sciences R&D. Major regional research centers include **IBM's Artificial Intelligence Hardware Center at SUNY Polytechnic Institute** and **Rensselaer Polytechnic Institute's Center for Computational Innovations**, which includes the 24th most powerful supercomputer in the world.

Albany NanoTech Complex

JOBS (2020)

▸ **8,234 Software / IT Cluster jobs**
- 3,300+ Computer Systems Design Services
- 2,300+ Custom Computer Programming
  - 400+ Digital Gaming
- 1,200 Data Process and Hosting
- 1,100+ Software Publisher

R&D ASSETS

▸ **University R&D Expenditures (2019)**
- $15.2M in computer and IT sciences R&D
- 27,000 sf of academic R&D space

▸ **SUNY Polytechnic**
- IBM Artificial Intelligence Hardware Center
- New York State Data Center

▸ **Rensselaer Polytechnic Institute**
- Center for Computational Innovations (CCI)
  - 8 petaflop IBM POWER9-equipped AI supercomputer (AiMOS)
- Rensselaer Institute for Data Exploration and Applications (IDEA)
- Rensselaer Artificial Intelligence and Reasoning Laboratory (RAIR Lab)
- Scientific Computation Research Center (SCOREC)
- RPI Digital Gaming Hub

▸ **University at Albany**
- College of Emergency Preparedness, Homeland Security and Cybersecurity
- Institute for Informatics, Logistics, and Security Studies
- Atmospheric Sciences Research Center
- NYS Mesonet
- College of Engineering and Applied Sciences

▸ **GE Global Research**

TALENT PIPLINE (2020)

▸ **1,078** computer and IT sciences degrees awarded by 13 colleges and universities

▸ **UAlbany College of Emergency Preparedness, Homeland Security and Cybersecurity:** Nation's first standalone college dedicated to the topics of emergency preparedness, homeland security and cybersecurity
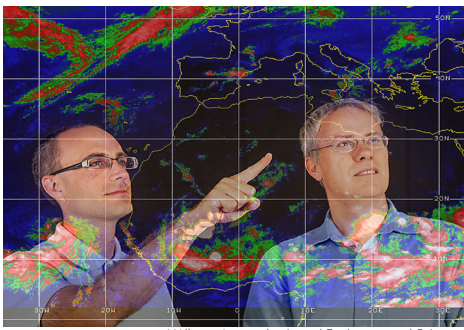
▸ **RPI Games and Simulation Arts and Sciences (GSAS):** Ranked the 5th Best Game Design School in the East by *Animation Career Review*

▸ **CanCode Communities:** A nonprofit that trains nontraditional students in coding

▸ **Capital Region Pathways in Technology Early College High School (P-TECH):** A program that allows students to earn both high school diplomas and associate's degrees in computer science, computer information systems and cybersecurity

▸ **Software Industry Apprenticeship Programs:** CEG administered apprenticeship program for software developer, data analyst and computer support technician positions, offered through Albany Can Code and SUNY Schenectady

▸ **NY Tech Loop:** Nonprofit association dedicated to attracting talent, supporting startups, and promoting the software community

UAlbany Atmospheric and Environmental Sciences

Velan Studios' Mario Kart Live Home Circuit

RPI AiMOS

INDUSTRY ASSETS

AI/MACHINE LEARNING
- **BuildingFootprintUSA**, Albany: machine learning-powered vector building footprint data
- **Dumbstruck**, Schenectady: AI-powered Emotional intelligence software for advertising
- **Flow Active**, Troy: AI-powered water leak monitoring IoT
- **International Electronic Machines**, Troy: Software solutions for vehicle inspection, security monitoring, maintenance activities, ect.
- **ITrakNeuro,** Albany: AI hardware and software solutions for MRI and angiography analysis
- **Kitware,** Clifton Park: AI for analyzing imagery and video, and more
- **Our.News,** Troy: Anti-misinformation platform with AI-powered fact-checking and news ratings

CYBERSECURITY/NETWORK SECURITY
- **ADKtechs,** Argyle
- **Center for Internet Security,** East Greenbush
- **Datto,** East Greenbush
- **GreyCastle Security,** Troy
- **Leet Cyber Security,** Albany
- **OrbitalFire,** Queensbury

DATA STORAGE/HOSTING/MANAGEMENT
- **Garnet River,** Saratoga Springs
- **Informz,** Saratoga Springs
- **Logical Net Corp.,** Schenectady
- **Saratoga Data System,** Saratoga Springs
- **Stored Technology Solutions,** Queensbury
- **StackNexus,** Schenectady
- **Zones Nfrastructure,** Clifton Park

DIGITAL GAMING
- **1st Playable Productions,** Troy
- **Network Next,** Troy
- **PUBG MadGlory,** Saratoga Springs
- **Wolfjaw Studios,** Saratoga Springs
- **Velan Studios,** Troy
- **Vicarious Visions,** Albany
- **WB Games NY,** Troy

E-COMMERCE/SUPPLY/INVENTORY
- **CommerceHub,** Albany: Cloud-based ecommerce fulfillment and marketing solutions
- **Valogix,** Saratoga Springs: Inventory planning, demand planning, & supply planning, forecasting and inventory

E-DISCOVERY/E-RESEARCH ADMINISTRATION
- **InfoEd Global,** Albany
- **Knowledge Builders,** Albany
- **Rational Enterprise,** Albany

GOVERNMENT/SCHOOL
- **CSRA State and Local Solutions,** East Greenbush: IT services provider, part of General Dynamics Information Technology
- **Educational Vistas,** Schenectady: School district management systems and associated web-based software products
- **Gcom Software,** Albany: Government regulatory and inspection automation, customer engagement, and criminal justice solutions
- **Transfinder,** Schenectady: School bus tracking and routing solutions for schools
- **Tyler Technologies,** Latham: End-to-end information management solutions and services for local governments

HEALTHCARE/MEDICAL
- **3M Health Information Systems,** Albany: Healthcare solutions for payors and providors
- **Apithealth,** Troy: Behavioral health telemedicine platform
- **CMA Consulting Services,** Latham: Systems integration and case management services
- **DataGen Healthcare Analytics,** East Greenbush: Healthcare payment solutions
- **Glauconix Biosciences,** Albany: Ex-vivo, dynamic 3D human tissue models
- **Hixny,** Albany: Health information exchange
- **Intelligent Medicine,** Schenectady: Medical procedure modeling and simulation solutions
- **Levrx,** Troy: pharmacy spend management software
- **RGI-Informatics,** Cornwallville: Health analytics for dynamic analytics and clinical quality metric analysis
- **Virtual Phantoms,** Albany: Fast medical radiation dose computing software
- **Somml Health,** Albany: Virtual care platform
- **IPACES,** Ballston Lake: Neuro-exer game for Alzheimer's and related dementia
- **iSimulate,** Albany: medical simulation software for CPR training
- **UCM Digital Health,** Troy: 24/7 telehealth treat, triage and navigation service
- **UTM: Healthcare,** Hudson: Remote patient monitoring and telehealth
- **XchangeWorx,** Colonie: Population health management solutions
- **ZephyRx,** Albany: Pulmonary function testing using video games and virtual reality

INDUSTRY-SPECIFIC BUSINESS SOFTWARE
- **Auto/Mate Dealership Systems,** Albany: Auto dealerships
- **Bestpass,** Albany: Trucking/toll management
- **Construction Industry Solutions,** Latham: Construction and engineering
- **ECI Software Solutions,** Latham: Building supply
- **Epicor,** Schenectady: Manufacturing, distribution, retail, and services organizations
- **Execontrol,** Clifton Park: Manufacturing, retail, distribution, services
- **Ithos Global,** Troy: Cosmetics and nutrition industries
- **InspectPoint,** Troy: Fire/Life Safety Inspection Software
- **Trophecase,** Schenectady: Social media network for athletes with digital player cards

OTHER
- **Building Footprints USA:** High-accuracy location data for locating, analyzing and visualizing critical business information
- **Nielsen Gracenote:** Entertainment data
- **Passport for Good:** Volunteerism tracking

R&D
- **GE Global Research,** Niskayuna: Imaging, cybersecurity, network security, robotics, ect.
- **Kitware,** Clifton Park: Open-source software R&D
- **Simmetrix:** Component software for simulation-based
- **Weather Routing Inc.,** Glens Falls: Maritime weather forecasting and routing
- **WRI Energy,** Glens Falls: Weather forecasting and routing for offshore wind

SOFTWARE DEVELOPMENT
- **Bespoke Software,** Albany
- **Gavant Software,** Troy
- **Osprey Software,** Albany
- **Conduent,** Albany
- **CommSoft,** Rensselaer
- **Jahnel Group,** Schenectady
- **Troy Web Consulting,** Troy
- **MM Hayes,** Menands