The Capital Region’s Software IT employs more than 9,900 and includes some of the nation’s most advanced software R&D firms and computer science research centers. Together – and coupled with the region’s affordability and quality of life – they have helped it be named one of the Best Places to Find a Technology Job by U.S. News & World Report. Local colleges and universities annually spend more than $15 million on computer sciences R&D and 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 houses the 24th most powerful supercomputer in the world.

**JOBS (2019)**

- 9,900 Software / IT Cluster jobs (+11% over 5 years)
  - 3,900+ Computer Systems Design Services
  - 2,800+ Custom Computer Programming
    - 330+ Digital Gaming
  - 1,500 Data Process and Hosting
  - 1,300+ Software Publisher Jobs
  - 230+ Other Computer-Related Services
  - 140+ Computer Facilities Management Services

**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

**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)
- Scientific Computation Research Center (SCOREC)
- RPI Digital Gaming Hub

**Talent Pipeline (2018)**

- 1,037 computer and IT sciences degrees awarded, including 153 master’s and 19 doctor’s degrees
- 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
- Albany Can Code: Nonprofit that trains nontraditional students in coding
- Capital Region Pathways in Technology Early College High School (P-TECH): 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
- AI Center of Excellence: A hub for AI education, envisioning, co-working and an AI hardware development lab

**University R&D Expenditures (2018)**
- $15.4M in computer and IT science

**R&D Assets**
- SUNY Polytechnic
- IBM Artificial Intelligence Hardware Center
- New York State Data Center
- Rensselaer Polytechnic Institute
- Center for Computational Innovations (CCI)
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INDUSTRY ASSETS

AI/MACHINE LEARNING
- **Dumbstruck**, Schenectady: Emotional intelligence software for advertising
- **International Electronic Machines**, Troy: Software solutions for vehicle inspection, security monitoring, maintenance activities, etc.
- **GE Global Research**, Niskayuna: AI and machine learning for industrial processes and computer vision
- **IBM**, Albany: AI hardware lab

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
- **Logical Net Corp.**, Schenectady
- **Saratoga Data System**, Saratoga Springs
- **Stored Technology Solutions**, Queensbury
- **Zones Nfrastructure**, Clifton Park

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

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
- **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 providers
- **CMA Consulting Services**, Latham: Systems integration and case management services
- **Ilum Health Solutions**, Albany: Clinical machine learning for hospital pathogen warning systems
- **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

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)

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
- **First Drops**, Troy: Water leak monitoring IoT
- **GE Global Research**, Niskayuna: Imaging, cybersecurity, network security, robotics, etc.
- **Gluaconix Biosciences**, Albany: Ex-vivo, dynamic 3D human tissue models
- **Kitware**, Clifton Park: open-source software R&D
- **Simmetric**: Component software for simulation-based

SOFTWARE DEVELOPMENT
- **Bespoke Software**, Albany
- **Gavant Software**, Troy
- **Osprey Software**, Albany
- **Troy Web Consulting**, Troy
- **MM Hayes**, Menands
- **CommSoft**, Rensselaer
- **Jahnel Group**, Schenectady
- **Railroad 19**, Saratoga Springs
- **Conduent**, Albany

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