

SOFTWARE / IT

in New York's Capital Region



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.



Jahnel Group


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

R&D ASSETS

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

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



Transfinder



Vicarious Visions



RPI AIMOS

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, ect.
- **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
- **Illum 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, ect.
- **Glauconix Biosciences**, Albany: Ex-vivo, dynamic 3D human tissue models
- **Kitware**, Clifton Park: open-source software R&D
- **Simmetrix**: 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



CommerceHub