Information & Communications Technology in Washington State
Washington State
Why Choose Washington?

#1 Most Innovative State (Bloomberg 2013)

#1 Greenest State (CNBC 2014)

#1 Best State to Make a Living (Forbes 2014)

#3 Cities using Technology to Become Smart and Connected – Seattle (Forbes 2014)

#6 Best State for Business (Tax Foundation 2013)

#9 Happiest State (Forbes 2014)
Tax Incentives

• We offer a range of incentives geared toward attracting and retaining businesses that will create jobs and enhance economic vitality and stability.

• Most of these incentives are customized to meet the needs of specific industries.
Choose Washington: Energy Costs

Electricity Rates (cents/kwh)

Source: U.S. Energy Information Administration
Key Business Sectors

- Aerospace
- Advanced manufacturing
- Information and communication technology
- Life sciences and global health
- Clean technology
- Agriculture and food processing
- Marine technology
- Military
Choose Washington: Cross-sector Synergies

Collaboration with other industries will drive aerospace growth in the future.

- Aerospace
  - UAV payloads; Cyber security; GPS systems; design and aerodynamics
- ICT
- Life Sciences
- Clean Technology
- Space
  - Composites; advanced materials
- Aviation Biofuels
More people, in more countries, are traveling by air.
Space Exploration

- Washington is one of the leading states in space exploration, particularly in propulsion systems for use beyond the Earth’s atmosphere.
- Outer space business in Washington is generating about $150 million in revenue and is growing. It employs about 1,000 people.
Washington State’s Galaxy of Tech Stars
Washington State’s Technology Leaders

- Adobe
- Attachmate
- Big Fish Games
- Blue Nile
- Concur
- Corbis
- Cray
- Glympse
- F5 Networks
- INRIX
- Tableau Software
- Valve
- Zulily

- Amazon
  - 28,500 employees in Washington
  - 149,500 employees worldwide

- Expedia
  - 3,000 employees in Washington
  - 14,750 employees worldwide

- Microsoft
  - 41,489 employees in Washington
  - 128,076 employees worldwide

- real
  - 1,000 employees in Washington

- T-Mobile
  - 3,200 employees in Washington
  - 36,000 employees worldwide

- Zillow
  - 500 employees in Washington
  - 1,100 employees worldwide
Washington ICT Fast Facts

- 14,000 ICT companies
- +$100 billion total revenue (another $90b Amazon)
- $600 billion in market capitalization for the top 10 public ICT companies
- 238,900 ICT workers (2013) including 90,000 software developers
- 6.9 times the US average in Application Software Development occupations
- $70 million in 60 seed investments and $700 million in 140 venture capital investments in 2013
Figures do not include the estimated 5,000 sole ICT sole proprietorships in the state.
ICT Employment Growth

AMAZON, MICROSOFT AND GOOGLE WORLD EMPLOYMENT, 2008-2014

- Amazon: 149,500 employees, +4X growth since 2010
- Microsoft: 128,076 employees
- Google: 53,600

- 6,680 economy-wide ICT job openings each year between 2017 and 2022 in Washington State
ICT-Related Occupations

**ICT-Related Occupations, Washington State, 2013**

<table>
<thead>
<tr>
<th>Essential &amp; Core</th>
<th>Occupation Code</th>
<th>Occupation Title</th>
<th>Washington Employment</th>
<th></th>
<th>ICT Industries</th>
<th>% in ICT Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential</td>
<td>15-1132</td>
<td>Software Developers, Applications</td>
<td>53,975</td>
<td>42,959</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>ICT</td>
<td>15-1131</td>
<td>Computer Programmers</td>
<td>16,014</td>
<td>11,496</td>
<td>72%</td>
<td></td>
</tr>
<tr>
<td>Occupations</td>
<td>15-1133</td>
<td>Software Developers, Systems Software</td>
<td>8,664</td>
<td>4,096</td>
<td>72%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17-2071</td>
<td>Electrical Engineers (some)</td>
<td>5,891</td>
<td>971</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-1143</td>
<td>Computer Network Architects</td>
<td>4,314</td>
<td>991</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-1111</td>
<td>Computer and Information Research Scientists</td>
<td>1,080</td>
<td>634</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Essential ICT Occupations</strong></td>
<td></td>
<td></td>
<td>89,938</td>
<td>61,147</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Other Core</td>
<td>15-1121</td>
<td>Computer Systems Analysts</td>
<td>15,017</td>
<td>5,293</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>ICT</td>
<td>15-1151</td>
<td>Computer User Support Specialists</td>
<td>13,325</td>
<td>5,320</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Occupations</td>
<td>11-3021</td>
<td>Computer and Information Systems Managers</td>
<td>9,344</td>
<td>4,061</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-1142</td>
<td>Network and Computer Systems Administrators</td>
<td>8,881</td>
<td>2,373</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-1134</td>
<td>Web Developers</td>
<td>5,670</td>
<td>3,048</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-1152</td>
<td>Computer Network Support Specialists</td>
<td>4,588</td>
<td>1,531</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-1199</td>
<td>Computer Occupations, All Other</td>
<td>4,704</td>
<td>1,913</td>
<td>41%</td>
<td></td>
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<tr>
<td></td>
<td>15-1141</td>
<td>Database Administrators</td>
<td>2,847</td>
<td>686</td>
<td>24%</td>
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<td></td>
<td>15-1122</td>
<td>Information Security Analysts</td>
<td>2,273</td>
<td>876</td>
<td>39%</td>
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<tr>
<td></td>
<td>15-2031</td>
<td>Operations Research Analysts</td>
<td>2,073</td>
<td>220</td>
<td>11%</td>
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<tr>
<td></td>
<td>17-2061</td>
<td>Computer Hardware Engineers</td>
<td>1,515</td>
<td>1,121</td>
<td>74%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Core</strong></td>
<td></td>
<td></td>
<td>70,237</td>
<td>26,442</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td><strong>Total ICT Core Occupations</strong></td>
<td></td>
<td></td>
<td>160,175</td>
<td>87,589</td>
<td>55%</td>
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</tbody>
</table>

Annual Median Salary by Occupation

In-State and Out-Of-State ICT Acquisitions, 2005-2013, Billions of 2013 Dollars

Source: Crunchbase, 2014.
Early Stage Investments in ICT 2005-2013
Core ICT Industries

- Big data analytics
- Cloud computing, infrastructure
- Digital media
- E-Commerce
- Mobile applications
- Telecommunications
- Product development and testing
- Games
Best Buy Announcement

Mary Lou Kelley, the company's president of e-commerce, said they looked elsewhere first, but eventually found Seattle to be a "perfect fit."

Places like the Silicon Valley have a strong startup mentality, she added, but Seattle is the place to go to find cloud and e-commerce engineers. Companies like Amazon, Expedia, Nordstrom and Zulily have all have helped create a deep talent pool and a "great e-commerce community" here.
Mobile Applications

- Deloitte Digital
- kitchenbowl
- ZIRX
- every.move
- PaperKarma
- TUNE
- INRIX
- zomato
- Groupon Getaways
- Porch
- tipbit
- BigOven
Did You Know?

Seattle-Redmond Area is the most competitive region in the US for doing business in Interactive Media

Annual growth rate of 14% in Interactive Media companies since 2007

$19.2 Billion in revenue by local Interactive Media companies

Seattle-Redmond Area Within 30 square miles YOU’LL FIND:

330+ Interactive Media companies

Major Publishers and Distributors

Over 17,400 Interactive Media employees

Top Notch Interactive Media and CSE Education

WIN’s REACTOR initiative accelerates our industry
Games

Washington is the most competitive region in the U.S. for games

18% annual growth rate

Thriving development ecosystem

Seattle area has the largest concentration of game developers in the U.S.
A Vibrant Startup Ecosystem

Support organizations
→ 28 co-working spaces
→ 15 non-profit and governmental organizations
→ 20 educational programs

Entrepreneurial assistance
→ 8 accelerators & 6 incubators

Financing
→ 12 seed investing funds
→ 10 venture capital groups
→ 6+ lending & financing sources

Networking opportunities
→ 295 meet-ups

StartupSeattle.com
University of Washington

- UW’s programs produce some of the best talent for top ICT companies in Washington
- 90% of graduates are placed in companies in the state
- 250 tech start-ups have come out UW
- CoMotion Business Incubator
- Buerke Center for Entrepreneurship
- Jones Accelerator
UW Entrepreneurs in Residence

• Designed for experienced entrepreneurs who want to start a company based on UW technology.

• Six to nine month tenure.

• EIRs receive a stipend and workspace.

• Selected entrepreneurs have priority for facilities and certain types of funding.

• EIRs help assess new innovations and make recommendations on commercialization.
Tech Giants with Seattle Development Offices

- Booking.com
- eBay
- Facebook
- GoDaddy
- HTC
- Hulu
- HBO
- Jawbone
- Nutanix
- Salesforce.com
- Splunk
- Basho
- Swype
- Zirx
- Apple
- LiveTiles
- Dropbox
- Groupon
- Helion
- Oracle
- Twitter
- Alibaba.com
- Belkin
- Google
“I think the preponderance of technologists in the Valley causes them to lose sight of the real world. Seattle, on the other hand, has just the right mix; enough of us to feel part of the tribe, but in small enough measure that we don’t inadvertently create an echo chamber bubble of boredom.”

Spencer Rascoff
Zillow CEO
“With a thriving tech industry and an immense talent pool surrounding the University of Washington’s world-renowned computer science & engineering and electrical engineering programs, Seattle is ground zero for recruiting the top data scientists, software engineers and developers in the country.”

Shwetak Patel
Belkin Chief Scientist
Startup Culture

“The Pacific Northwest is teeming with entrepreneurial activity and it’s fortunate indeed to live in a region where the city recognizes and supports the impact entrepreneurship has on the local economy. This region is also home to some of the top startup accelerators and incubators in the country, with Techstars launching some of the hottest consumer tech startups, Microsoft Ventures with a new track on the Internet of Things, and one of the top B2B accelerators in the country with 9Mile Labs.”

Sanjay Puri
9Mile Labs Partner
"Washington provides the distinction and combination of world-renowned multinational organizations, the largest number of small and medium sized businesses in the nation and a robust startup ecosystem. It is backed by top ranking universities and favorable incentives, regulations and support from state legislators. This provides unique opportunities to businesses of all sizes and sectors across the globe to establish deep-rooted long-term relationships and partnerships leading to a tremendous growth potential, and eventual success. To top it off, the state offers exceptional schools, a prolific and affluent culture, and an unparalleled safe, healthy and balanced lifestyle for active families of today to grow and have fun."

Haresh Ved
TiE Angels Group Founder & Chair
Technology Leadership in Washington

Satya Nadella
Chief Executive Officer
Microsoft Corporation

Steve Singh
Chief Executive Officer
Concur

Sujal M. Patel
Co-Founder
Isilon Systems, Inc.

Vij
Vice Provost for Innovation
University of Washington

Rao Remala
Cronus Ventures, LLC.
Microsoft Veteran
India’s ICT Investment in Washington State
India’s Growth Technologies in the Next 10 Years
Opportunities for Cooperation

Mobile Internet

Verifiable Digital Identity

Next Generation Genomics

Knowledge Work Automation

Cloud Technology

Internet of Things

Advanced GIS

Advanced Energy Storage

Intelligent Transportation & Distribution

Next Generation Genomics

Cloud Technology

Advanced GIS

Advanced Energy Storage
Working with Washington

- Business Development Assistance
- Site Selection
- Soft Landing Package
- Referrals

Mary Trimarco  
**Assistant Director**  
Seattle, WA 98121  
Mary.Trimarco@commerce.wa.gov  
+1 206.256.6146

Mark Calhoon  
**Senior Managing Director**  
Seattle, WA 98121  
Mark.Calhoon@commerce.wa.gov  
+1 206.256.6137

Ashish M  
**India Chief Representative India**  
Ashish.M@intadc.com  
Mumbai  
9004-468288 or 22-4006-7070

[www.choosewashingtonstate.com/india](http://www.choosewashingtonstate.com/india)
Washington State University

- Creative Media and Digital Culture Program
- Extension Program for Digital Inclusion (PDI)
- MOVE Lab
- Nouspace Gallery & Media Lounge
- VanTechy Meetup
- Vancouver-Camas Innovation Partnership Zone
## ICT Start-ups from the University of Washington

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>University</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Rosetta@Cloud</td>
<td>UW</td>
<td>Caters to the pharmaceutical and biotech industries, offering molecular modeling in the cloud.</td>
</tr>
<tr>
<td>2012</td>
<td>RGB HATS LLC</td>
<td>UW</td>
<td>Released “Control-Alt-Hack”, a card game aimed at making learning about computer safety and security more engaging for high school and college students.</td>
</tr>
<tr>
<td>2012</td>
<td>CompSoftBook</td>
<td>UW</td>
<td>Developed and maintains an online assessment tool geared specifically towards evaluation of computer science and programming courses.</td>
</tr>
<tr>
<td>2012</td>
<td>Soluxra</td>
<td>UW</td>
<td>Produces thermally-stable, advanced polymer-material inputs for telecommunications and optical computing devices that improve performance and reliability.</td>
</tr>
<tr>
<td>2010</td>
<td>Portage Bay Photonics</td>
<td>UW</td>
<td>Supported by grants from the Department of Defense and the United States Air Force, Portage Bay Photonics is in the process of developing advanced photonic devices with silicon inputs to increase the speed of optical systems, computers, and other communication devices.</td>
</tr>
<tr>
<td>2008</td>
<td>Patient Stream</td>
<td>UW</td>
<td>Develops cloud-based applications that optimize healthcare procedures with the goal of expediting and streamlining patient care.</td>
</tr>
<tr>
<td>2007</td>
<td>TransformativeMed</td>
<td>UW</td>
<td>A leader in health information technology, TransformativeMed develops software that augments the value of current electronic medical record systems for hospitals and other healthcare providers.</td>
</tr>
<tr>
<td>2007</td>
<td>Ionographics, Inc.</td>
<td>UW</td>
<td>Specializes in Electrochemical Printing, a computer-aided process involving electrochemical microfabrication technology.</td>
</tr>
<tr>
<td>2006</td>
<td>Skytap</td>
<td>UW</td>
<td>Skytap Cloud caters to organizations and software designers, allowing them to work together to develop, refine, and assess new and established applications in the cloud.</td>
</tr>
<tr>
<td>2006</td>
<td>Nimbic</td>
<td>UW</td>
<td>Provides 3D Full-Wave, electromagnetic simulation solutions for chip-package-board design.</td>
</tr>
<tr>
<td>2006</td>
<td>MapWith.US</td>
<td>WSU</td>
<td>Advanced geospatial technology that affords users the ability to create and customize online maps.</td>
</tr>
<tr>
<td>2005</td>
<td>GridStat</td>
<td>WSU</td>
<td>Smart grid research and development funded by grants from the Department of Energy, Department of Homeland Security, and the National Science Foundation.</td>
</tr>
<tr>
<td>2004</td>
<td>Farecast</td>
<td>UW</td>
<td>A technology developed to predict fluctuations in airfare prices, which Microsoft purchased and rebranded as Bing Travel.</td>
</tr>
<tr>
<td>2001</td>
<td>DiMeMa, Inc.</td>
<td>UW</td>
<td>Publisher of CONTENTdm, digital management software designed for libraries. In 2003, the Online Computer Library Center (OCLC) acquired DiMeMa.</td>
</tr>
</tbody>
</table>