TECH SECTOR PROFILE

INSIDE:

- Types of jobs in the local tech sector
- Skills you need to get hired
- Training and post-secondary education options for after high school graduation
- Information about tech companies and the prospects for jobs in Lane County
- What you can do to get started now on a career in the tech industry
JOBS IN TECH

**Front End Developers** are responsible for implementing the visual elements that users see and interact with on the website or application.

**User Experience Designers** are focused on how the website feels to a user. They will concentrate on potential stumbling blocks and focus on creating the "best" user experience possible.

Job Titles:
Front End Developer
Lead Designer
Web Designer
UX Designer (User Experience Designer)
QA Engineer (Quality Assurance Engineer) – this can be for both front end and back end work.

**Back end developers** are web developers that concentrate their work on the large amounts of data on a website or computer application. They decide on how all the data is stored, modified, and accessed.

Job Titles:
Software Developer
Web Application Developer
Software Engineer
Data Engineer
Application Engineer

**IT Support Positions** help monitor and maintain technology systems in an organization. This can be a front line position helping employees with password issues, setting up computers into the organization's network, and email problems.

**Systems Administrators** are responsible for the organization's data and how it is securely monitored, maintained, and managed through servers. This role sets up the database and oversees troubleshooting when problems arise.

Job Titles:
IT Systems Administrator
Systems Administrator
Desktop IT Manager
Systems Engineer
DevOps Engineer

**Marketing team:** works on email strategies, blog posts, written content, search engine optimization, and copywriting.

**Sales team:** sells a service or product to the customer through phone conversation, web demonstrations, skype, and/or trade shows.

**Product/Project Manager:** works at the intersection between marketing, technology, and user experience. This person manages the road maps so their team stays focused, understands what is trying to be solved, and works within the AGILE development sprint cycle.

**Human Resources Specialist:** helps to hire people for the company and support employees while at the company.

Local tech companies can range in size from one person, to over 100 employees. For example, **CBT Nuggets** is located near the Valley River Center and has approximately 75 employees. They create online training modules for IT professionals that include videos, quizzes, learning communities and virtual labs to practice skills. CBT Nuggets employs people who work in each of the four areas above, plus more!
While most programmers have experience learning and using at least one or more programming languages, many people working in IT do not recommend any one language, because what is relevant to coding is always changing.

Math and logical reasoning are very important for anyone that is interested in a career in technology. Statistics, algebra and problem solving are necessary to understand Google analytics, search engine optimization, online commerce and profit margins.

For those interested in designing online experiences, it is important to understand the principles of visual and graphic design, accessibility for everyone, and capturing attention.

Undoubtedly, perhaps the most important set of skills is that of good verbal and written communication. This includes proper spelling and grammar, as well as the ability to express yourself clearly to others. Teamwork is vital in the tech industry. Carissa Bunnell, Fulfillment Manager for Quorum says, "You need to be able to use different styles of communication to explain things to people."

A compilation of over 100 interviews of local tech representatives shows the most important skill employers look for is effective communication.

In addition to good communication, people who work in IT are curious, self-driven, and motivated problem solvers who never give up.

Employees are expected to be dependable, timely, and adaptable. They should take pride in their work and be able to apply the skills they learn in one setting to solving a problem in a different setting. Matt Miller, Partner of TOBA Capital and Vice President of Acquisition at Quorum says, "I am looking for people that have a positive attitude, are problem solvers, are proactive and can work well with others."

Most importantly, a good employee is humble and is willing to accept advice and coaching. Bau Kim, Front End Developer at IDX, gives this advice: "Be okay with not knowing things. A lot of my day is filled with not knowing everything, but I know I am going to learn it by searching for answers."

Megan Wood, Lead Designer at Partnered Solutions IT says, "Don't be afraid to dive into something new."
HOW CAN I GET A JOB IN THE TECH SECTOR?

POST-4 YEAR UNIVERSITY

• Get a Bachelor’s degree in Computer Science or Computer Information Systems.
• Specialize in network security, computational science, software development or database and informatics.
• Apply for jobs as a software engineer.
• Earn an average of $72,000.

POST-2 YEAR COLLEGE

• Complete an Associate of Science Oregon Transfer degree in Computer Science.
• Apply for positions in programming, computer information systems, computer network operations or game development.
• Earn an average of $53,000 per year as a programmer.

POST-HIGH SCHOOL

• Do an apprenticeship program or short-term coding bootcamp.
• Gain experience necessary to apply for entry-level software design.
• Make an average of $45,000 as a Computer Support Specialist.

While there are over 400 tech firms in Eugene and over 4,000 people working in tech in the local area, almost every large company also has an IT department. There are many paths toward a job in tech. Raymond Hardman, CEO of Emerald Broadband says, "Technology impacts all industries."

Robert Steck, CEO of Partnered Solutions IT says, "If you are interested in a career in tech, why aren’t you already doing it?" There are books to read, websites to teach to coding, and computers to take apart and put back together. You can volunteer to build a website for local church or organization without needing to know code. Here are a few resources for you to get started:

Local tech scene: techoregon.org, siliconshire.org
Online courses: codeacademy.com, codeschool.com
Events: Hack-for-a-Cause, meetup.com, Tech Tours
Portfolio resources: github.com, prottsman.com, lynda.com, wix.com, wordpress.com, lanestem.org
Job shadows & internships: elevatelanecounty.org
Check with your high school counselor for the date of the next Experience Oregon Tech!