**Lab: IoT Related Job and Learning Opportunities**

**Objectives**

The purpose of this lab is to explore job and learning opportunities in the ever-evolving world of the internet of Things.

**Part 1: Identify three IoT related jobs that interest you.**

**Part 2: Research the available job descriptions for these positions and identify the required skill sets.**

**Part 3: Identify learning opportunities available to you to obtain these skills.**

**Part 4: Share this information with your classmates to collectively compile a listing of IoT related job and learning opportunities in your region.**

1. **Background / Scenario**

The Internet of Things is growing exponentially. New technologies and applications are being developed on a regular basis and this creates an abundance of new job opportunities each with its requisite skill sets. It is important to stay current with the skills required for this evolving job market and to take advantage of the many available learning opportunities currently available.

1. **Required Resources**

* A PC with internet access running a current web browser.

1. **Part 1**: **Use a web browser to research jobs currently available in the Internet of Things.**

Open up a web browser and navigate to the [https:/google.com](https://www.google.com/) site.

Type into the search criteria “types of jobs with learning opportunities in the internet of things.”

1. You can include other relevant words, like lifelong learning or even a job title that you may be already interested in.
2. Identify and document three job designations that you are interested in.

Agricultural Technologist

Wearable Tech Designer

Medical Robot Designer

1. **Part 2**: **Determine the skill set required for each of these positions.**
   * + 1. Use the Google search engine to research into the job titles that you have identified as interesting. Search for the skill sets required for these job titles. Pay special attention to skills required for multiple positions.

**Agricultural Technologist :**

* providing information and advice to farmers about their businesses
* selecting crops based on soil conditions
* studying weed control
* helping farmers pick the right livestock
* conducting lab tests and taking field samples
* able to make precise observations
* able to draw conclusions from data
* able to communicate technical information clearly and accurately
* flexible and versatile, particularly for field work
* able to work independently but also work well as part of a team
* good writing skills
* communication skills
* research skills
* an interest in natural processes

**Wearable Tech Designer**

* Augment, don’t replicate
* Design, don’t reuse
* One size does not fit all
* Think always on, think low power
* Security above all
* Build a viable ecosystem
* Get the price right

**Medical Robot Designer**

* Systems Thinking. ...
* The Programming Mindset. ...
* Active Learning. ...
* Mathematics. ...
* Science or other Applied Mathematics. ...
* Judgment and Decision Making. ...
* Good Communication. ...
* Technology **Design**.

1. **Part 3**: **Explore learning opportunities.**
   * + 1. Use the Google search engine and other available resources, and research learning opportunities available within the sphere of those job titles. Document all the information gathered from this research

Can learn on internet, IT center, university, ….

1. **Part 4**: **Compile a database of IoT-related job and learning opportunities.**
   * + 1. Work with your classmates to compile a listing of available IoT related jobs, required skill sets, and learning opportunities. Try to identify trends and from this information develop a personal learning plan.

• Development Engineer, Mobile (IoT PaaS)

• Applications Engineer- IoT mbed

• Java Developer (IoT & M2M)

• IoT Developer

• Senior Mobile QA Engineer (IoT, PaaS)

• Technician IoT Devices Support

• Big Data Lead (IoT)

• Data Scientist - IoT

• Data Engineer Sensors and IoT Applications

• Chief IoT Officer

• Director of DevOps - Sensors, Analytics, and

IoT

• Research Director - Information Assurance

and IoT Security

• Azure Cloud Architect (IoT)

• IoT Solutions Architect

• Product Manager – IoT Smart Cities

• Segment Marketing Manager - IoT

Technologies

• Connected Spaces IoT Consultant

C++ Software Developer (Smart Lighting IoT)

Personal level

• Have a growth mindset

• Stay relevant – learn the lingo

• Learn to code

• Develop skills – Analytical, Critical thinking, Collaborative, cross functional, team based problem-solving

• Take your education in your own hand

1. **Reflection**

Are there any patterns observable in the IoT job market?

Yes