# Unit 11

# e-portfolio artefacts

1. **SWOT analysis**

**Strengths**

My strengths lie in my ability to learn quickly and independently, coupled with a creative approach to problem-solving. My unique background in histopathology provides a significant advantage in the healthcare data science field, allowing me to understand complex medical data with a depth most others lack. I am also proficient in technical coding languages like Python, R, and SQL, and possess a strong sense of self-awareness, knowing my limitations and when to seek assistance. Additional strengths include a solid foundation in subject understanding, research, critical thinking, and time management, along with a high level of expertise in areas like customer satisfaction, teamwork, and leadership. I also demonstrate a good grasp of technical skills and experience with community activities, showing that I can consider diverse perspectives.

**Weaknesses**

However, I also recognise several weaknesses that require attention. I often struggle with self-doubt and imposter syndrome, which can hinder my confidence. Public speaking is another area where I lack confidence. Additionally, time constraints sometimes leave me feeling stagnant, as I struggle to improve in all areas simultaneously. I also tend to underestimate my abilities and harbour a fear of failure that can prevent me from taking calculated risks. I also need to put consistent effort into keeping up with industry tools and emerging technologies, and I have limited practical application of SQL, Scripting Languages, and e-library resources. Furthermore, I need to further develop the ability to articulate my personal values and ethics.

**Opportunities**

Opportunities abound in my field. I plan to leverage LinkedIn and university connections to find supportive mentors, network with peers at industry events, and choose a challenging capstone project to expand my skillset and enhance job prospects. Staying current with emerging technologies through regular reading will be a priority. My strong connection with BHR hospitals, who are actively pursuing digital pathology, presents a unique opportunity to gain access to resources and expertise in the application of machine learning to histopathology. I can also leverage my existing expertise to mentor or assist others, take on projects that require the use of less familiar tools, and engage in activities that promote ethical reasoning and communication. Additionally, I can use the master's program to learn more about the Computing field.

**Threats**

Despite these opportunities, I face several threats. Rapid technological advancements could make current skills obsolete if not updated. Lack of familiarity with certain tools may hinder collaboration or project success. Insufficiently developed ethical framework may lead to poor decision-making in complex situations. The current tech job market is unstable, and my lack of professional data science experience poses a challenge in securing entry-level positions. Time constraints limit the number of job applications I can submit.

1. **Professional skills matrix:**

See excel spread sheet

1. **Action plan:**

* **Commercial Awareness:**
  + Set aside dedicated time each week to read industry publications, blogs, and attend webinars.
  + Identify key influencers and thought leaders in the field and follow them on social media.
  + Attend industry conferences or workshops to network and learn about new tools and technologies.
  + Seek out opportunities to apply new tools and technologies in projects or assignments.
* **Technical Skills:**
  + Complete online courses or tutorials to improve proficiency in SQL and a chosen scripting language.
  + Practice using these tools regularly, even for small, personal projects.
  + Explore the e-library resources available through the university to enhance research skills and access relevant materials.
* **Ethical Awareness:**
  + Actively participate in discussions and activities related to professional ethics.
  + Reflect on personal values and how they align with ethical principles in the computing field.
  + Seek feedback from mentors or peers on how to articulate personal values and ethics more effectively.
* **Subject Application**
  + Actively participate in a range of community activities
  + Seek to understand other people's perspectives
  + Work constructively with differences in viewpoints

1. **Learning loop**

This Professional Development Plan (PDP) is a synthesis of my ongoing learning and self-assessment throughout the program. It integrates the skills matrices and action plans developed in individual modules, providing a holistic perspective on my growth and development.

**Reflection on Key Skills and Competencies:**

The skills matrix provided has been instrumental in identifying my strengths and areas for development. My strengths in areas such as subject understanding, research, critical thinking, and technical skills (Python, R, Git) have been consistently demonstrated across modules. My ability to quickly learn and apply new knowledge, coupled with my creative problem-solving approach, has been a valuable asset in tackling complex assignments and projects.

However, the matrices also highlighted areas where I need to improve. Specifically, I need to dedicate more effort to keeping up with industry tools and emerging technologies, and to develop a stronger command of SQL, scripting languages, and e-library resources. I also recognize the importance of being able to articulate my personal values and ethics, and I am committed to developing this skill further.

**Application of Learning to Professional Context:**

The knowledge and skills I have gained through this program are directly applicable to my work in the healthcare data science field. My background in histopathology, combined with my data analysis skills, allows me to approach complex medical data with a unique perspective. I am confident that I can leverage my abilities to contribute to the development of innovative solutions that improve patient care and outcomes.

**Action Plan for Continued Development:**

The action plan outlined in this PDP provides a roadmap for my continued professional development. By focusing on the areas identified as needing improvement, I can enhance my skills and competencies, and position myself for success in my chosen field. I am committed to regularly reviewing and updating this plan, and to seeking out opportunities to apply my learning in real-world settings.