

Goals	Success Criteria	Actions	Resources	Support	Timing
<b>Goal 1: Explore additional methods of project effort estimation</b>	<ul style="list-style-type: none"> <li>• Successful completion of work</li> <li>• Increased well-being and satisfaction with work</li> </ul>	<ul style="list-style-type: none"> <li>• Explore academic literature in the subject</li> <li>• Explore industry experience on the subject</li> <li>• Apply at least two techniques for final year dissertation project</li> </ul>	<ul style="list-style-type: none"> <li>• Online Courses: Coursera, Pluralsight, Microsoft Learn</li> <li>• Communities: LinkedIn groups, Tech groups</li> </ul>	<ul style="list-style-type: none"> <li>• Work peers</li> <li>• Work mentors</li> <li>• Work interest groups</li> </ul>	In the next 3-6 months
<b>Goal 2: Develop Python Security Best Practices further</b>	<ul style="list-style-type: none"> <li>• Successfully implement secure coding practices in at least 3 production projects</li> <li>• Achieve proficiency in using Python security tools and frameworks</li> <li>• Create a security testing framework for the development team</li> </ul>	<ul style="list-style-type: none"> <li>• Master input validation and sanitisation techniques using Python's built-in functions</li> <li>• Explore static code analysis tools like Bandit and PyLint further on developed code</li> <li>• Explore real-time security monitoring using data science techniques</li> <li>• Practice secure data encryption and backup procedures</li> </ul>	<ul style="list-style-type: none"> <li>• Books on software development with Python</li> <li>• Python security frameworks (PyCrypto, Cryptography, Authlib)</li> <li>• Built-in Python security modules (hashlib, SSL)</li> <li>• Static analysis and testing tools</li> </ul>	<ul style="list-style-type: none"> <li>• Online Python and software engineering communities (on <i>Stack Overflow</i>, <i>DEV.to</i>, <i>Medium.com</i>)</li> <li>• Work peers</li> <li>• Work mentors</li> <li>• Work interest groups</li> </ul>	In the next 12 months
<b>Goal 3: Assess Data Science applications to Software Security</b>	<ul style="list-style-type: none"> <li>• Experimental implementation of a predictive model for threat detection</li> </ul>	<ul style="list-style-type: none"> <li>• Develop models for anomaly detection in system logs</li> <li>• Create secure coding guidelines specific to data science workflows</li> </ul>	<ul style="list-style-type: none"> <li>• Machine learning algorithms for security analysis</li> <li>• Data analysis tools and frameworks</li> </ul>	<ul style="list-style-type: none"> <li>• Online datascience communities</li> <li>• Offline data science communities and meetups</li> <li>• Work peers</li> <li>• Work mentors</li> </ul>	In the next 6 months