Professional Development Plan (PDP)

| Development Goal | Current Status | Action Steps | Resources/Support | Timeline | Expected Outcome |
|--------------------------------------|----------------------------------|-----------------------------------|------------------------------------|---------------|---|
| Strengthen hybrid agent architecture | Good theoretical knowledge | Work on applied use cases | Python tutorials, frameworks | 3-6 months | Ability to design & implement scalable systems |
| Improve Python for communication | Intermediate skills | Develop projects using KQML | PyCharm, GitHub | 3 months | Efficient protocol implementation |
| Deepen NLP & dialogue systems | Basic experience | Take NLP course, experiment | Coursera, open-source libraries | 2 months | Intelligent interfaces with NLP |
| Enhance leadership skills | Collaborative contributor | Lead design meetings | Team projects | Ongoing | Confidence in leading technical teams |
| Advance in XAI & multi-agent systems | Introductory knowledge | Attend webinars, research | IEEE, Arxiv | 1 year | Ability to build transparent multi- agent systems |

Skills Matrix

| Skill Area | Before Module | After Module | Evidence |
|----------------------------|--------------------|-------------------------------|--------------------------------|
| Agent architectures | Basic awareness | Confident in comparing models | Forum posts; Unit reflections |
| First-order logic | Minimal exposure | Can formalise agent reasoning | Unit 2–4 exercises |
| Communication protocols | No prior knowledge | Can design message flows | DFAS project contributions |
| Team collaboration | Good experience | Improved coordination | Team contract; peer reviews |
| NLP and parsing | Basic awareness | Can apply basic NLP | Unit 7–8 exercises |
| Critical reflection | Developing skill | Structured reflection | This report & PDP |
| Ethical awareness in AI | Limited | Increased understanding | Discussions; literature |
| Professional communication | Moderate | Improved clarity | Presentation; documentation |