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| **Competency** | **Skill** | **Skill Level** | **Evidence** |
| **Professional** | Be able to communicate effectively the information to the technical and non-technical audience. | **Advanced** | Prepared project reports describing the complex ideas of ML concepts (e.g. neural networks and clustering) in a simple language. Jupyter Notebooks used to both present results to technical and non-technical customers. Scikit-learn documentation |
|  | Prepare the in-house communication documents (reports, diagrams and charts). | **Advanced** | Latex and Markdown project report preparation in GitHub. Obtained a visual representation of regression and ANN models using Matplotlib and Seaborn, all of which are clear and reproducible. |
|  | Remain knowledgeable of industry tools, new technology Continuous training on ML tools and libraries. | **Advanced** | Delved actively into libraries of evolving Python that persist in exploring including TensorFlow and PyTorch |
|  | Be members of scientific and professional organisations. | **Intermediate** | Active participant of data science community on world systems through GitHub and Kaggle forums. Subscribed to IEEE Cyclical Intelligence Society to get professional information. |
|  | Illustrate knowledge regarding computing field codes of conduct. | **Advanced** | Adhered to the rules of ethical research provided in the Code of Conduct (British Computer Society). Responsible usage of AI as to the privacy and data security. |
| **Subject Understanding, Research, Critical Thinking, Time Management** | Provide analytical critique on complicated concepts in the discipline of Computer Science. | **Advanced** | Performance metrics that are analyzed (e.g., MSE, R 2, silhouette score) to determine the reliability of the model. Limitations in evaluation of clustering and ANN-based models that are critically looked at. There were various tasks of the units that were handled by time. |
|  | Examine real-life problems of an advanced nature in an application of computer. | **Advanced** | Applied machine learning to Airbnb business analysis, solving practical problems of pricing and demand prediction on a regression and clustering basis. Collaborative workflow, Used Git version control. |
| **Legal and Ethical Awareness** | Abide by the letter and spirit of available legislation. | **Advanced** | Secured data processing and anonymity in working with the ML project with GDPR compliance. Adhered to the principles of the EU AI Act draft. |
|  | Promote privacy and confidentiality of information. | **Advanced** | Manage the datasets in a reasonable way by covering identifiers and providing openly available data sources. Considered in relation to the ethical implications of AI in reflecting on projects. |
| **Teamwork and Leadership** | Work in a variety of teams and work towards objectives. | **Advanced** | A variety of data sources (e.g., Kaggle datasets) were used to enhance the training of the models. Have used suitable algorithms (K-Means, Linear Regression, ANN) as per statistical evidence. |
|  | Provide and accept effective feedback. | **Advanced** | Participated in peer discussion and review through collaborative posts and circle of issues tracking through GH. The efficiency of the code is improved by sharing comments. |
| **Creativity and Problem Solving** | Informed choice is made based on various data sources. | **Advanced** | Formulated hybrid agent systems that were performance-oriented and included the consideration of ethical and societal responsibility. |
| **Technical (Data science)** | Python programming for ML | **Advanced** | ML models developed and optimized by using Scikit-learns, Pandas and NumPy. ARC: Bad debugging and JIT code optimization in Jupyter. |
|  | GitHub teamwork engineering and control. | **Advanced** | Git Advisory The Machine Learning project has managed collaborative repositories that can use branching, pull requests, and commits. |
|  | Modelling development and evaluation. | **Advanced** | Trained and experimented ML models, and cross-validating and hyperparametrical tuning. Precision-recall measures and used confusion matrices used to evaluate the models. |
| **Subject Application and Global Citizenship and Ethics** | fair, accountable and transparent software development in AI systems during module reflection | **Advanced** | Apply in software development Reflect on the fairness, accountability and transparency of AI system through module reflection. Fuller appreciated the social consequences of a discriminatory approach to data in ML (MIT Technology Review, 2023). |
|  | Keep in view the opinions of other people. | **Advanced** | Coordinated with members of international teams, acknowledging other opinions of possible ML strategies and ethical issues. Exhibited compassion and flexibility. |