

Senior Capstone Self Assessment

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Part A:

To build an AI that composes music, I used a variety of machine learning techniques such as deep learning and neural networks. I trained the model on a large dataset of existing music to learn patterns and structures that make up different genres of music. In terms of my individual contributions, I selected the dataset to train the AI on and developed the neural network architecture. I also fine-tuned the AI's output to match specific musical styles or moods.

To build upon the skills identified in my initial assessment, I utilized programming languages like Python, machine learning frameworks like TensorFlow or PyTorch, and data processing tools like pandas. I also used my creativity and knowledge of music theory to inform the development of the AI's output. Through working on this project, I developed competencies in machine learning, deep learning, data processing, and music theory. I also developed skills in programming, problem-solving, and creativity.

My successes included developing an AI that can compose music that sounds realistic and enjoyable to listen to. However, I faced obstacles in fine-tuning the AI to accurately capture the nuances of different musical styles and dealing with limitations in the dataset used to train the AI.

Part B:

Although I did not work in a group for this project, I still learned several valuable lessons about group work that I can apply in future projects. I realized that effective communication, collaboration, and delegation are essential for successful teamwork, and I practiced these skills on my own by seeking feedback from mentors and peers and managing my own workload. I found that self-motivation, discipline, and accountability were crucial in keeping myself on track and meeting my deadlines. I also utilized external resources, such as online tutorials and forums, to learn new skills and troubleshoot issues that I encountered during the project.

Overall, working on this solo project gave me a unique perspective on both the benefits and challenges of working independently versus in a group. I believe that the skills and insights that I gained from this experience will be valuable as I move forward in my career.