Musical Chords: A Mobile App That Auto-Generates Chord Progressions

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A song's backbone is its chord progressions, a series of chords that improve the harmony and add to the overall composition. For individuals ranging from beginners to creative artists, comprehending and implementing music theory grammar for their own compositions can stifle the music creation process and cause song-writer's block. The existing Chord Progression generator Apps in the marketplace focus on producing only pre-selected progressions and often fail to conform to music theory guidelines or provide APIs for other musicians to build on. They have limitations, such as a lack of fully-digitized datasets for all possible four-chord and eight-chord progressions and limited AI and ML use-case models. To address these limitations, a novel automated music theory chord progression and variations generator App has been developed. This App offers a piano user interface, that applies music theory to generate all possible four-chord and eight-chord progressions and produces three alternate variations of the generated progressions selected by the user. This innovative approach provides musicians with a comprehensive and customizable tool for their music creation, providing inspiration, allowing them to unleash their creativity, and develop their signature sounds. Musicians of all levels can use it to expand their horizons and take their music to the next level, making it a truly inspiring tool.

Awards Won:
Arizona State University: Arizona State University ISEF Scholarship (valued at up to $52,000 each)