Company Background: Atomic Cartoons is an artist-driven, multifaceted studio that includes some of North America's most creative animators, directors, producers, and writers.

Description of Work: We propose to develop a video-to-text description application. The purpose of this application would be to take animation video files and create detailed description of what is happening in the video. We would also want an ability to train the model on our own data. Some of the details that the model should be able to analyse but not limited to are as follows:

- Scene composition
- Time of day
- Characters in the scene
- Character actions
- Character mood
- Lighting Direction
- Camera Movement

Desired Skill Set for Students:

- Proficiency in machine learning, particularly in video and image processing.
- Experience with TensorFlow or similar deep learning frameworks.
- Strong problem-solving skills and a keen interest in exploring emerging technologies

Preferred Team Size: We seek a project team comprising 2 to 3 students. This team size fosters collaboration, facilitates brainstorming sessions, and enables efficient task delegation to achieve project objectives within the stipulated timeframe.

Potential for Internship: Outstanding students who demonstrate exceptional performance may be offered internship opportunities at the conclusion of the course, contingent upon mutual agreement and availability of positions within our organization.

Location: While the work can be conducted remotely to accommodate students' preferences, occasional virtual meetings would be necessary for project updates and discussions.

Non-Disclosure Agreement (NDA): To safeguard confidential information and intellectual property, students will be required to sign a non-disclosure agreement (NDA) prior to commencement of the project.

Intellectual Property Rights: We will request students to assign intellectual property rights to our organization for any artifacts generated during the project. This ensures that we retain ownership of the work and can leverage it for future initiatives and developments.

We believe that this project presents an exciting opportunity for students to apply their expertise in machine learning and GenAI to address real-world challenges in the industrial printing sector. We are eager to collaborate with motivated and talented individuals to drive innovation and deliver enhanced value to our customers.