ILLUSTRATION 01

Research Objective

- Provide visual design support for JPL CoSTAR team (one of 11 participating teams) competing in the Defense Advanced Research Projects Agency (DARPA) Subterranean Challenge, which develops technologies that rapidly map, navigate, search, and exploit complex underground environments.

- Create cohesive and photorealistic visuals to depict JPL Concept of Operations and designs.

Research Approach

- 3D CAD renderings and references to showcase how wheeled rovers and tank-like tracked robots cover the ground along with flying drones that help locate out-of-reach objects.

- Illustration 01- External cave area demonstrating robot's narrative.

  Illustration 02- Internal area of the cave with robot's surveillance.
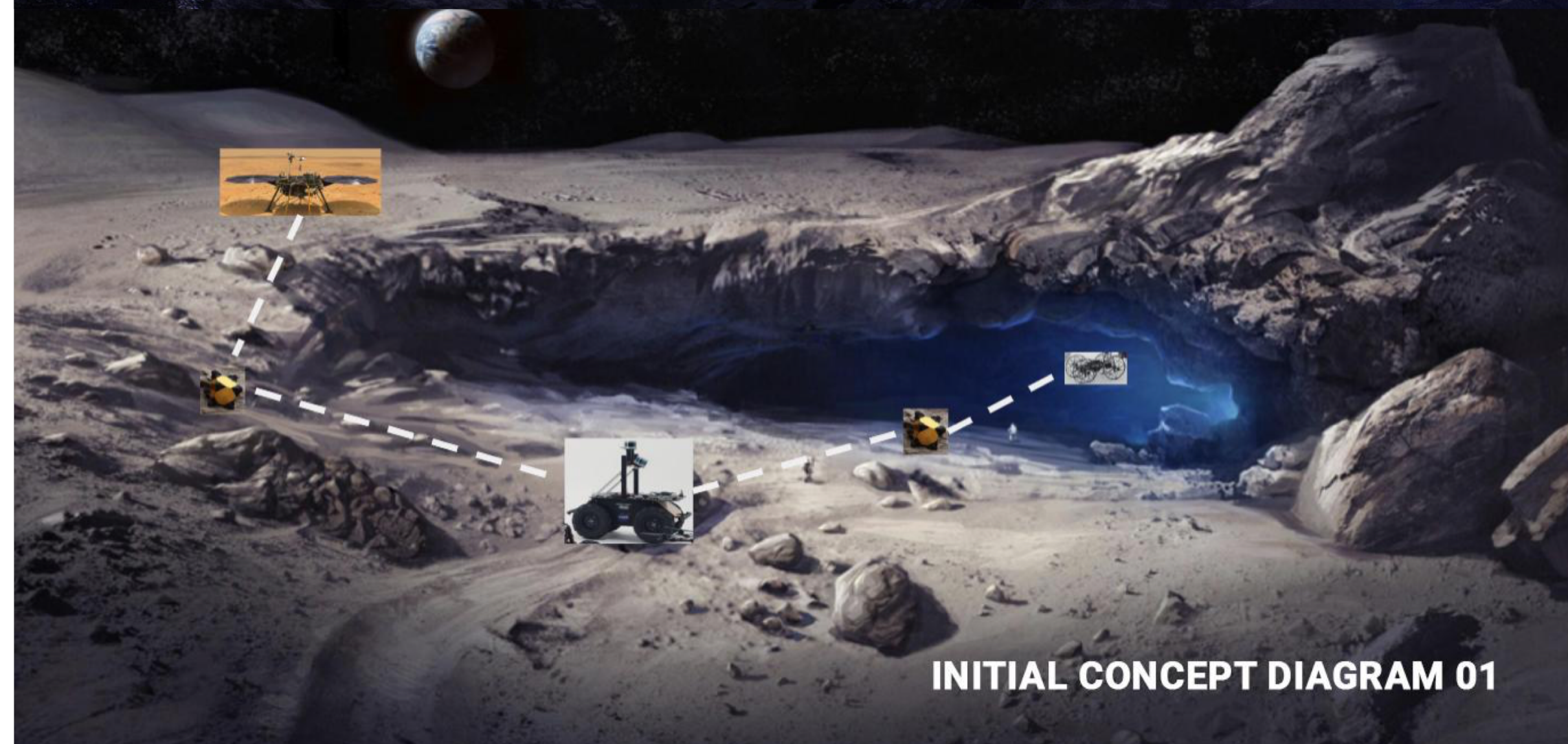
Research Team

ARCS Student Associates: Andila Wijekulasuriya, Amalia Arzunyan
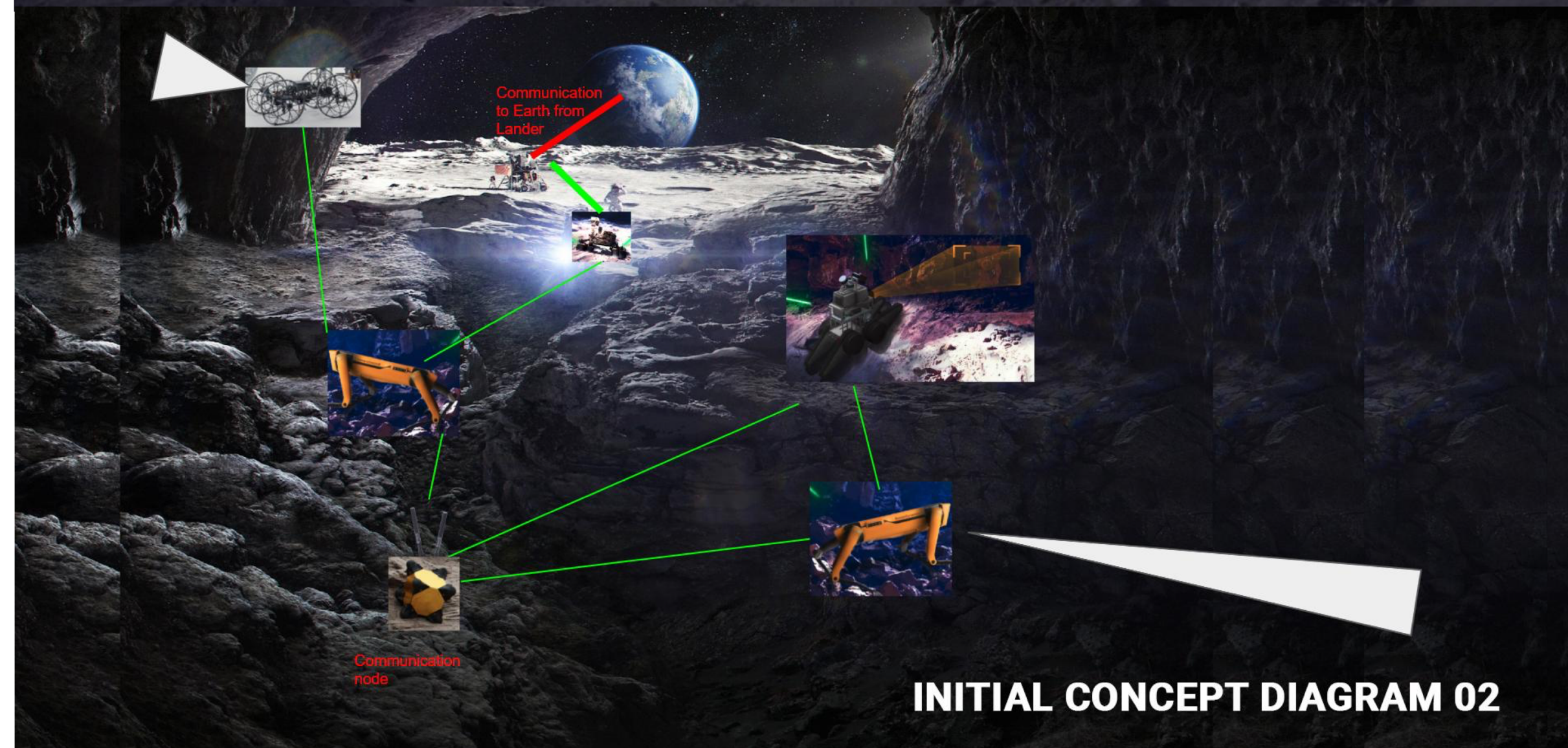
ARCS Advisor: Joe Bautista, MFA

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ILLUSTRATION 02

INITIAL CONCEPT DIAGRAM 01

INITIAL CONCEPT DIAGRAM 02