

## **TOPIC**

Virtual Reality and 4D - Immersive Construction Schedule Optimization

## **ABSTRACT**

4D scheduling and planning tools can be highly technical and sophisticated, but their true value can only be realized if their implementation translates directly into tangible efficiencies, improvements and time and cost savings for the project. This presentation will walk you through key improvements achieved on three different projects for the residential, commercial and public services projects in the US.

Key talking points in this presentation include construction sequencing, constructability, site utilization, resource allocation, material staging, communication across project team members, project scope review & capture; as well as Synchro PRO and Fuzer pitfalls, tips and work flows.

## **BIO**

Cristian Herrera is currently the Project Controls Director at VIATechnik. Current areas of expertise and ongoing research as part of his role at VIATechnik are Business Strategy, Project Management, Earned Value Analysis, Probabilistic Risk Analysis and the application of new technology to construction and design simulation, including 4D/5D modeling. Areas of focus include manufacturing, mega-projects, and institutional facilities. He is a Civil Engineer with 6 years of experience in capital project planning and management within the mining, construction, transportation and health care industries. He holds an MBA from the Kellogg School of Management and a Masters in Engineering Management from the McCormick School of Engineering at Northwestern University, with majors in Operations, Business Strategy and Decision Sciences.

Cristian worked on pre-construction deliverables and 4-year operational readiness schedules for Newmont Mining's \$5-billion Conga project in Peru. His current projects include performing detailed schedule risk studies for a manufacturing client to increase schedule predictability and improve internal scheduling practices; conducting the audit/review of a prime contractor's schedule for hotel project owner in Arizona; optimizing construction schedules through the implementation of 4D modeling; successfully completing multiple USACE-spec-compliant schedule baselines, updates and fragmentary network analyses.