Stelian Coros
Carnegie Mellon University

"Character Animation: From Virtual Environments to the Real World"

Wednesday, May 27, 2015
12:00 – 1:30 pm
Barus and Holley Room 190

Computer graphics techniques allow artists to realize their imaginative visions, leading to immersive virtual worlds. Nowadays, thanks to advancements in rapid manufacturing devices, tangible links between these vivid virtual worlds and our own can be created. In order to unleash the full potential of this technology however, a key challenge lies in determining the fundamental principles and design paradigms that allow digital content to be processed into forms that are suitable for fabrication. A particularly difficult sub-task is that of creating physical representations of animated virtual characters. In this talk, I will describe several techniques that can be applied towards addressing this challenge. More specifically, I will present a set of computational systems that greatly simplify the process of designing 3D printable, animated mechanical characters, and I will discuss the relation between physically-simulated virtual characters and legged robots.

Stelian Coros is an Assistant Professor in the Robotics Institute at Carnegie Mellon University. Prior to joining CMU, he was a Research Scientist working for Disney Research Zurich. He obtained his PhD in Computer Science from the University of British Columbia. Stelian's doctoral dissertation, which won the Alain Fournier Ph.D. Dissertation Annual Award, focused on models of motor control for physically-simulated virtual humans. His current research interests lie at the intersection between animation, robotics, computational design and digital fabrication.

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