

## Title: Coming slightly down to Earth: Transitioning from astronomy to Hollywood

*Abstract - Physicists and astronomers are remarkably well suited to tackle the problems of large scale quantitative measurement, prediction, statistical inference, and analytical interpretation faced by organizations in the modern, increasingly data-rich business environment. The non-academic opportunities for physics and astronomy graduates today are unprecedented in terms of domain diversity, employer demand, and impact. However, the traditional preparation of academic scientists is diverging from the skillsets and experiences expected by employers in industry, and students of the physical sciences can significantly improve their employment positioning by taking small, strategic steps during their professional training. In particular, demonstrable efficacy in communication, independent project leadership, interdisciplinary awareness, and methodological translation across domains is highly marketable, and these experiences can be cultivated in the context of academic professional development. I'll describe my own path from astronomy (MSU BS '10 and Harvard Ph.D. '14) to the Hollywood film studio Legendary Entertainment, and the developmental pieces that I assembled along the way. I'll also share some examples of our work at Legendary applying Bayesian statistical modeling, natural language processing, image recognition, and other techniques to solve novel problems in film green-lighting, casting, marketing, and other aspects of entertainment, and draw connections to my research in astronomy.*