

Carnegie Mellon University

Materials Science & Engineering

presents

Tools and Techniques of Reverse Engineering – a Survey

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ABSTRACT:

Intellectual property (IP) litigation is an expanding field, scaling with sustained technology-oriented economic growth. The use of expert testimony is often a critical element to the successful resolution of such matters. An attorney's ability to successfully litigate depends, to a large extent, on their understanding of the technical elements of the IP in question. Understanding how experts might approach IP (e.g., reverse engineering) can provide insight for strategic decisions. In this presentation, Dr. Joseph Tucker will discuss some of the various tools and techniques that engineers and scientists commonly utilize during the examination of IP matters. Highlights of Exponent and a consulting engineer career track will also be presented.

BIOGRAPHY:

Dr. Joseph Tucker is an Associate in Exponent's Materials and Corrosion Engineering practice, in their Atlanta, GA office. Dr. Tucker specializes in materials science and metallurgical engineering. He applies his expertise to failure analyses of all types, as well as intellectual property disputes, including validity and infringement. Prior to joining Exponent, Dr. Tucker was a Research Scientist, at Air Force Research Laboratories, located on Wright-Patterson Air Force Base. His work focused on jet engine rotating parts and aerospace structural materials as it relates to aircraft failure mechanisms. Using an integrated computational approach, Dr. Tucker produced open source and proprietary software for analyzing microstructural data and investigating titanium alloy life limiting behavior in aerospace structural applications. Dr. Tucker is also a contributor to DREAM.3D.

Dr. Tucker holds a Bachelor of Science from the University of Michigan – Ann Arbor and a Master of Science and Doctor of Philosophy from Carnegie Mellon University in Materials Science and Engineering. His doctoral work focused on analyzing nickel-based superalloy fatigue for aircraft turbine engine rotating part failure.

**Doherty Hall 2315, 11:30AM
Friday, April 8, 2016**