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## Cyber-physical security: Where to draw the line in additive manufacturing?

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Advances in additive manufacturing have had a disruptive influence to the conventional manufacturing process by bringing manufacturing to the hands of the customer and shortening the supply chain. The customer can customize and manufacture any 3D object using additive manufacturing without leaving their, lab or home. This paradigm shift in manufacturing raised concerns about the intellectual property rights of 3D objects. This talk presents a framework for provenance of 3D objects that investigates the transition of security properties from digital 3D objects to 3D printed objects because of the absence of such mechanisms. A wholistic security view of additive manufacturing process is discussed by presenting an additive manufacturing security reference model and a tool to benchmark security of additive manufacturing.

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