

Making sneakers sustainable with the 'Shoetopia' project

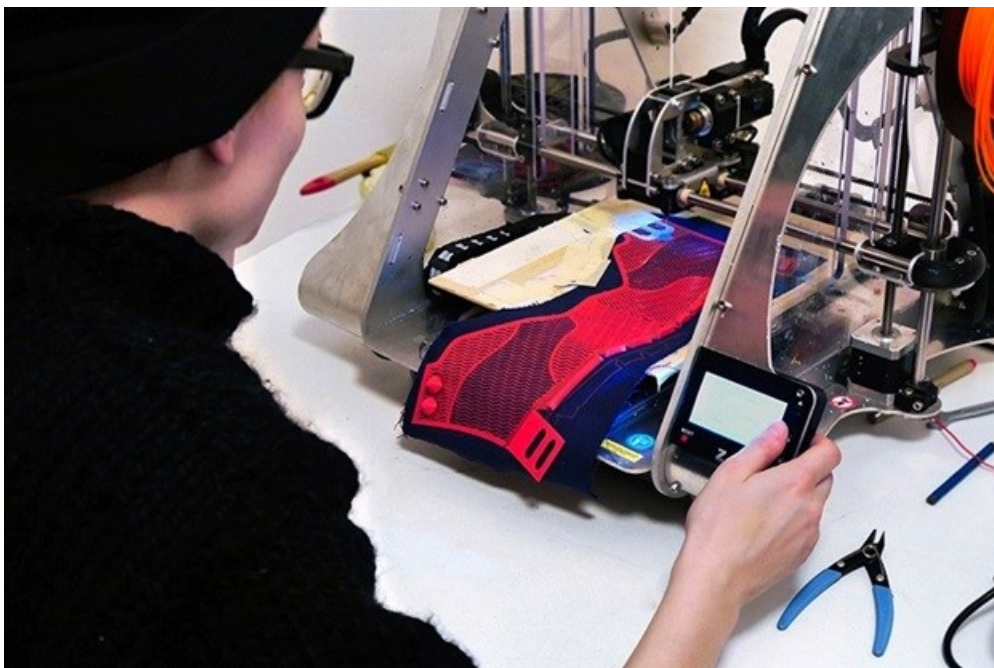
By [Lindsay Samson](#)

28 Apr 2017

As 3D printing and its resulting products become increasingly ubiquitous in modern design practices, industries of varying natures are utilising the technique in more inventive ways. Demonstrating the versatility of the practice, two Polish students from the [Academy of Fine Arts in Warsaw](#), [Zuzanna Gronowicz](#) and [Barbara Motylinska](#), have developed a prototype: a 3D-printed shoe made of eco-friendly materials. Called the 'Shoetopia' project, the biodegradable sneaker could have massive implications for the fashion industry's sustainability struggle.



Every year billions of shoes are produced in Asia and shipped to the rest of the world. The process utilises numerous materials in their production – most of which is nearly impossible to recycle. Gronowicz and Motylinska's prototype is a response to this sustainability crisis. Part of their graduation project, their unique creation proposes an alternative model for the production and distribution of footwear.



Constructed from flexible, biodegradable filament and natural textiles, the sneaker prototype is made using a ZMorph multitool 3D printer. While the duo initially struggled to find a way to stiffen the shoe's upper, it was a battle that unearthed an astonishing lesson: by printing the filament directly onto the material, Gronowicz and Motylinska found they were able to construct the entire shoe without using glue, making it more even more environmentally friendly and durable.



It's a concept that throws traditional modes of manufacturing out of the window and dramatically reduces production wastage. Designed to be built and modified via a custom-made smartphone app, users are even able to design their own shoe and send the order directly through the app.

Gronowicz and Motylinska plan to use their design to eventually start their own footwear business.

For more, visit: <https://www.bizcommunity.com>