

Benjn̄z

Benedict Jones



Professional, Academic & Personal
DESIGN PORTFOLIO, Summer 2025



www.benjnz.com

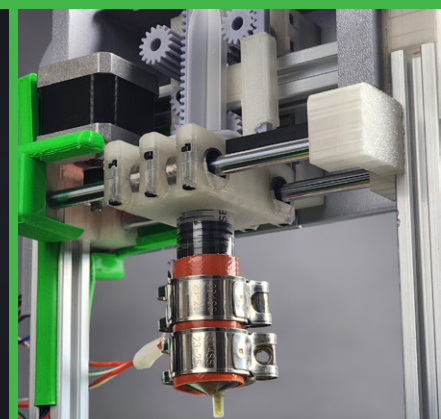
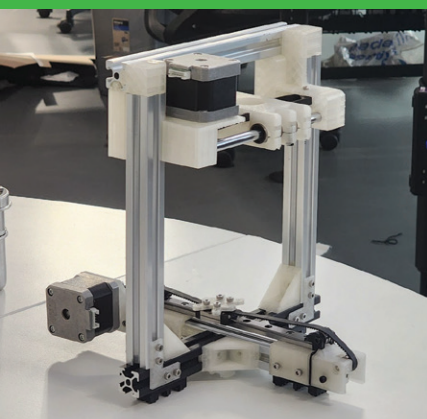
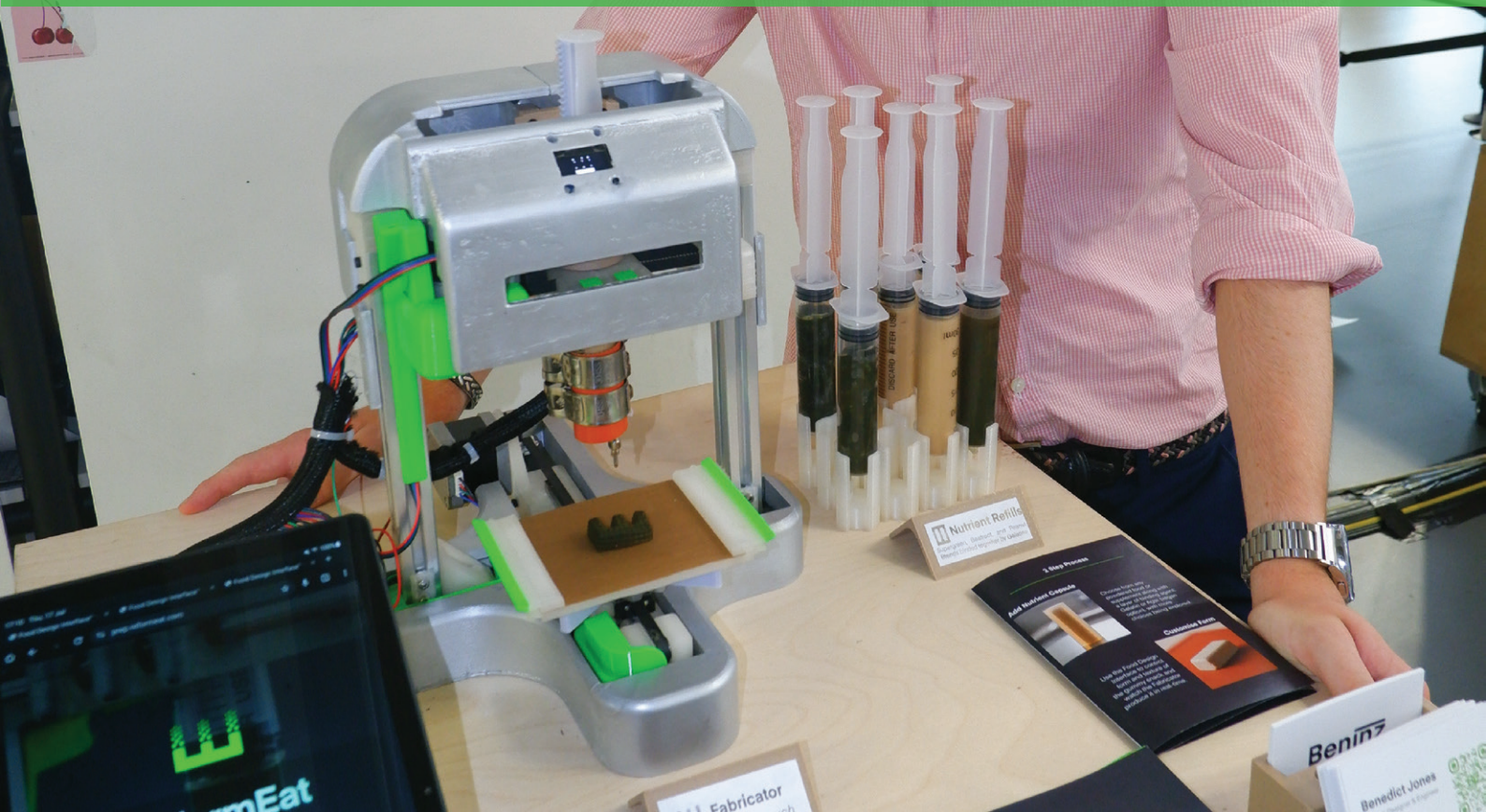


+447826265431

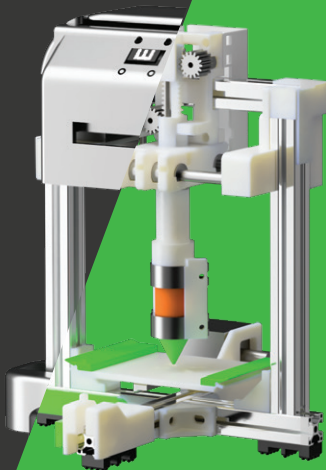


@benjnz

ReformEat - A Supplement Producing Appliance



Cutting-Edge Technology Meets Food Design



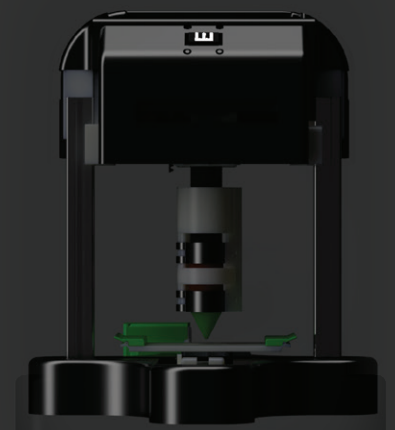
ReformEat Fabricator™ v1.0
ReformEat Food Design Interface™ v1.0

*Custom Design, Build & Development
by Benedict Jones, 2025*

A New World of Possibilities



www.reformeat.com
ben@benjnz.com



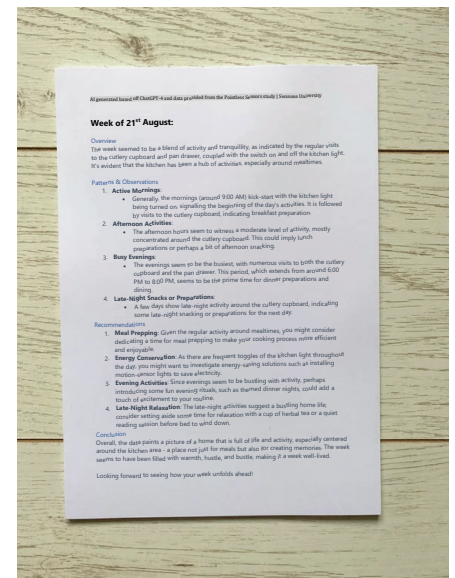
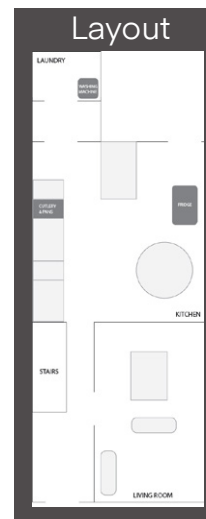
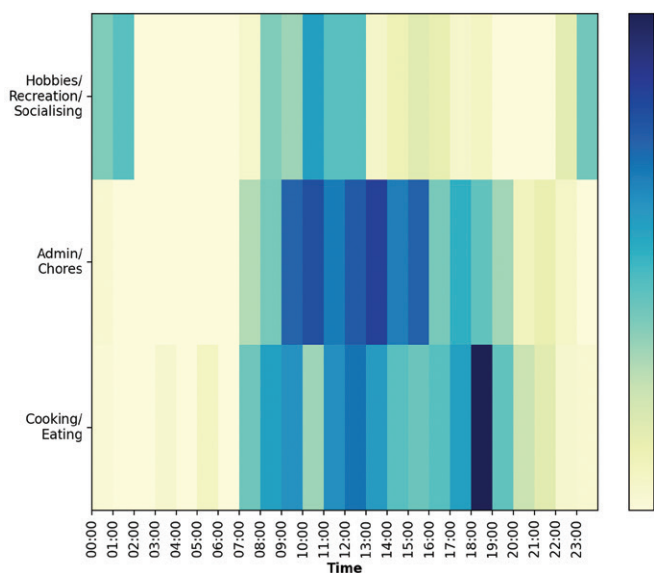
Active Ageing - A Publication in Assisted Ageing using IoTs



Self Powered, low level sensors

Heatmaps

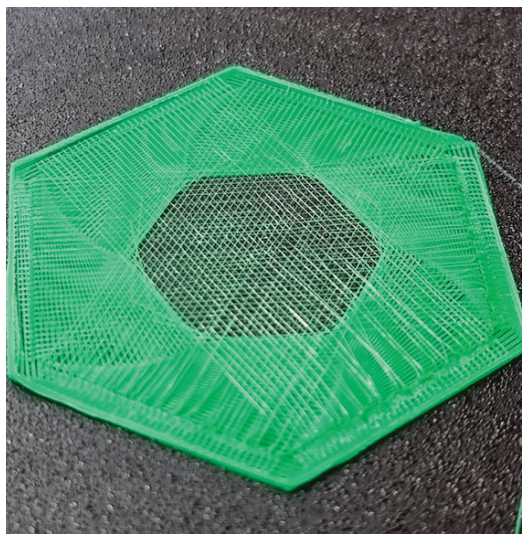
AI Generated *Diaries*



Each sensor was grouped into one of three categories: cooking; chores; hobbies. A heatmap format was used to visualise the data, showing participants a quick way of understanding when they were most engaged in each of the three categories, as detected by the IoT system.

"Internet of Things (IoT) technology is found in many homes. These systems enable tasks to be done more effectively or efficiently – e.g., securing property, monitoring and adjusting resources, tracking behaviours for well-being, and so on. The system presented here was designed with older adults; the vast majority of home IoT systems marketed to this age group are not growth-oriented but rather decline-focused, monitoring and signalling well-being issues. In contrast to both "mainstream" and "older adult" IoT frameworks, then, we present a toolkit designed only to platform reflections, conversations and insights by occupants and visitors in regards to diverse user-defined meaningful home activities: hobbies, socialisation, fun, relaxation, and so on. Furthermore, mindful of the climate crisis and the battery recharge or replacement requirements in conventional IoT systems, the toolkit is predominantly self-powered. We detail the design process and home deployments, highlighting the value of alternative data presentations from the simplest to LLM-enabled."

Investigating Parameters to Control 3D Printed Extrusions at Micro-Level using PLA and TPU



“Three-dimensional printing technology using deposition modeling can produce flexible microstructures. By using FullControl GCODE program directories (FCG), GCODE can be generated with enhanced control to create precise microlattices. These microlattices, with strings between 30-50 μ m in diameter, are printed from thermoplastic polyurethane (TPU) using a 0.2mm nozzle. This method offers a significant advantage over standard 3D modeling and slicing, which is typically limited to extrusions the diameter of the nozzle. The technique enables a variety of applications, including the preparation of cellular tissue for drug administration, custom medical wound dressings, micro-level water filtration, consumer textiles, and wearable technology. Lattices with these narrow strings have been consistently produced using a 0.2mm nozzle with both PLA (polylactic acid) and TPU filaments.”

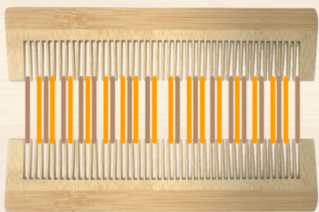
Capstone Report Written at Durham University; www.durham.ac.uk



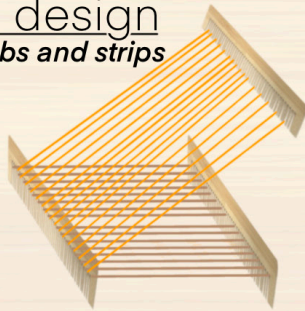
A Stool made from 100% Bamboo



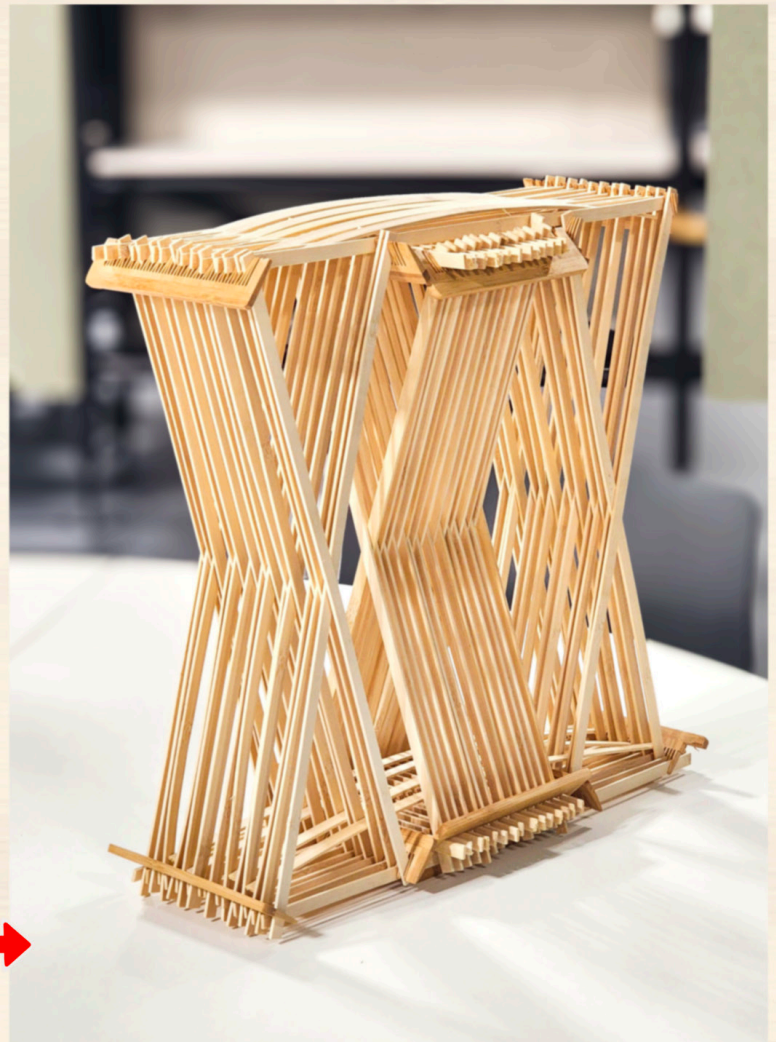
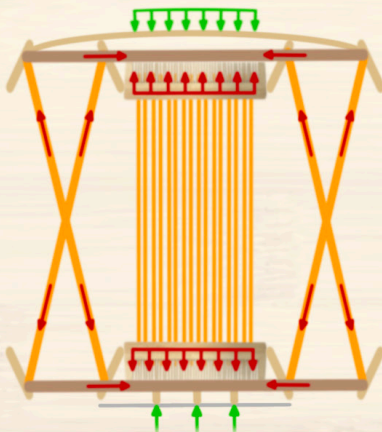
Mind The Tension
a stool design
Using bamboo combs and strips



46 gaps : 32 bamboo strips



To create tension between combs



An Urban Redevelopment Design for Camden Market Canal



Vision

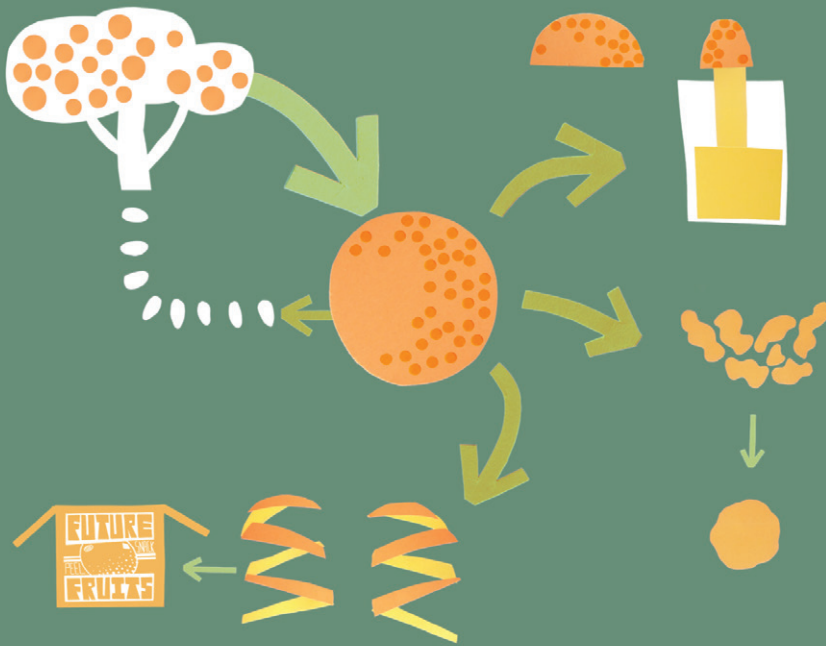
To bring Camden Town's rich historical and cultural narratives to life through a participatory community art initiative, enhancing the vibrancy, safety, and appeal of the canal area for residents and visitors alike.

Mission

To transform the Camden canal into a celebrated hub of creativity and history, fostering community pride, enriching the tourist experience, and creating a safer, more engaging environment for all.



Investigating How Orange Food Waste can be a Valuable Resource for a Circular Economy

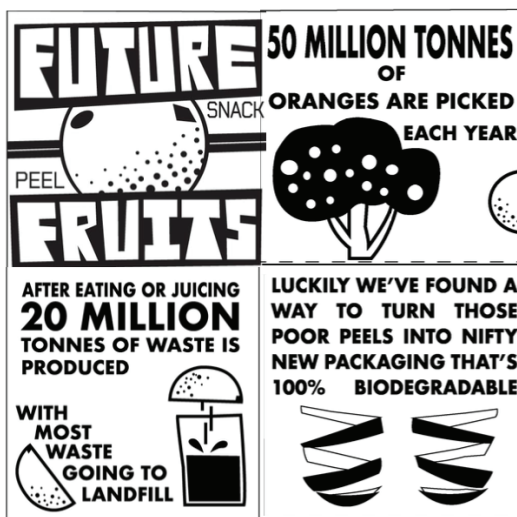


Orange Juice: The orange is squeezed to extract its juice, with the pulp and peel set aside.

Pulp Biscuits: The leftover pulp is mixed with flour and other ingredients to create biscuits, instead of being discarded.

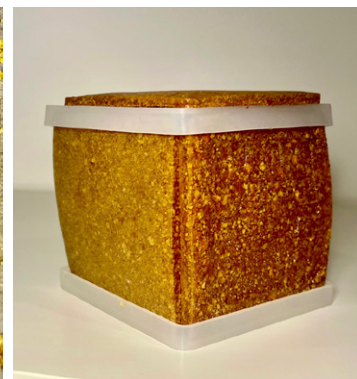
Peel Packaging: The orange peel is dried and ground into a powder, which is then used to create packaging for products.

Seed Replanting: The seeds from the orange are replanted to grow new trees, ensuring a continuous supply of oranges.

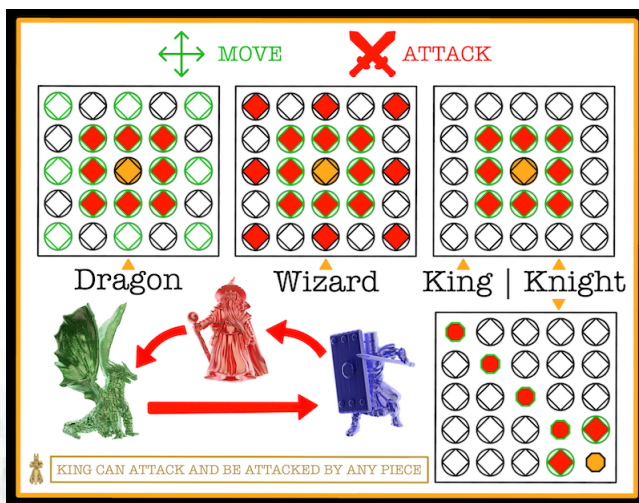


Experimentation using biomaterials:

- Sodium alginate & calcium chloride
- Gelatine & glycerol



King of The Hill: A Tabletop Strategy Boardgame



Gingerbread Designs



Benjn̄z



 www.benjnz.com

 +447826265431

 @benjnz