

## Technical Skills

Design Tools	Solid Works, AutoCAD, Fusion 360, Blender, Adobe Creative Suite (Photoshop, Illustrator, InDesign, Premiere Pro, After Effects)
Prototyping	3D printing (FDM & SLA), Laser cutting, Electronics prototyping, Hand modelling
Programming	Python, MATLAB, HTML/CSS/JS
Soft Skills	Interdisciplinary collaboration, Rapid ideation, Design communication, User research, Public speaking

## Projects

### 2025 **Novel Nutritional Fabrication Machine**

Designed, built, developed and tested a rapid additive gelatine-based machine and system for desktop use.

- Employed knowledge in electrics, electronics, mechanics, and rheology (of food), to construct a novel appliance.
- Built and incorporated a web-based app to personalise and define gummy snacks.
- The complete system was displayed at the RCA 2025 Expo in Battersea over 3 days and is listed for the James Dyson Award 2025.

### 2025 **Explored and Delivered an Innovative Solution to Fresh Food Packaging waste**

Worked in a team combining 5 different disciplines within the design and artisanal field over 6 months, delivering a keynote presentation at the end of the timeline.

- Researched and experimented with biomaterials to build packaging materials using powdered orange peel.
- Worked with branding design and built a narrative to contextualise the innovation.

### 2025 **Designed and Built a Bamboo Stool**

Using no adhesive, or Joineries other than Bamboo Combs.

- Designed and built a stool using bamboo combs and bamboo strips.
- Exhibited it along with 120 other stools in an exhibition.

### 2024 **Micro-3D Printing Thesis**

Developed a novel approach for micro-structured 3D prints using TPU on conventional printers.

- Engineered complex lattice structures without specialist machinery.
- Integrated parametric design with automated G-code generation.
- **Achieved a first-class result**; praised for technical creativity and repeatability.

### 2024 **Civil Engineering Structural Design**

Designed and calculated structural elements for a retaining wall project.

- Created full construction documentation and CAD detail drawings.
- **Received a first-class grade** for technical accuracy.

### 2023 **Open-Source Rube Goldberg Machine**

Led a team of 5 to design a fully printable chain reaction device.

- Delivered within a full academic cycle.
- Managed file repositories, user documentation, and presentation.

## Formal Experience

- Summer 2023 **Research Collaborator in HCI**, *Swansea University*, Swansea, Wales
- Co-developed a self-powered sensor array for environmental sensing.
  - Led user feedback sessions and visualised deployment data.
  - Coauthored a paper published at NordiCHI 2024; also created an accompanying video.
- 2022–2023 **Solidity Developer**, Remote
- Engaged in the ERC-20 space and developed numerous smart-contracts for various third-party projects. Notably, developed the first mainstream smart-contract with integrated depreciating fees.
  - Deployed and managed smart-contracts for active cryptocurrency projects during their initial launches.
- Summer 2020 **Computer Science Intern**, *Swansea University & Council*, Swansea, Wales
- Piloted a drone for surveying the Arena Abertawe infrastructure site.
  - Used photos/videos to generate accurate 3D models of future construction.

## Education

- 2024–2025 **Masters of Arts - Product Design**, *Royal College of Art*, London, UK
- 2020–2024 **Bachelors of Engineering - General & Civil (2:1)**, *Durham University*, Durham, UK
- 2013–2020 **A-levels: Mathematics (A\*), Further Mathematics (A), Physics (A), Art & Design (A), Welsh Baccalaureate (A\*)**  
**GCSEs: 10 A\*s, 2As**, *Olchfa Comprehensive School*, UK

## Certifications

- Active CAA Operator License
- 2014–2021 Duke of Edinburgh - Bronze, Silver & Gold
- 2014 Grade 4 ABRSM (Piano)

## Volunteering

- 2022 Intern youth leader, Jubilee Community Church (Cape Town)
- 2017–2019 Young leader, Beavers (Scouts UK division)

## Languages

- English Native proficiency
- Welsh Intermediate (spoken and written)

## Interests

- Creative Novel product design, DIY electronics, physical computing
- Personal Tennis, photography, travel, content creation

**Benjñz**