

## THE NIMBUS RESEARCH CENTRE CONDUCTS FEASIBILITY STUDY ON THE PRODUCTION OF 3D PRINTED FRAMES

# ESPY & IRIS

### BACKGROUND

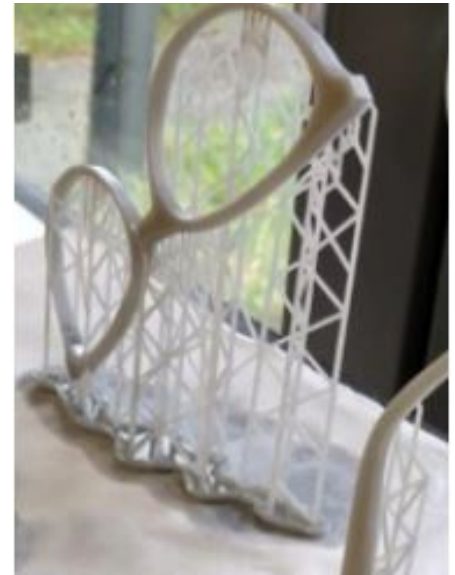
Espy & Iris was founded by a family from Cork with a simple objective; to offer high-quality, on-trend eyewear at amazing prices. Their founder is a practising optician ensuring that Espy & Iris delivers a top-quality dispensing service.

### THE NEED

Espy & Iris approached the Nimbus Research Centre to conduct a technical feasibility study, investigating how far 3D printing technology has progressed for producing high-quality frames for wearable glasses.

The primary issues to be addressed were:

- Technical feedback on the characteristics of the prints.
- Cost analysis of 3D printing as a means of design and rapid prototyping.
- Post-print work: tooling and re-work required.



### THE SOLUTION

The Nimbus Research Centre assists clients of all sizes, from start-ups and SMEs to multinationals, to develop product prototypes. Nimbus acts as a resource to bring business ideas to life, functioning as an extension of the company's research and development capability.

Using various technologies including 3D scanning, 3D modelling and 3D printing, Nimbus researchers were able to demonstrate and provide technical expertise on the feasibility of these technologies in the eye-wear sector. The impact on end-to-end design, rapid prototyping, and production of eye-wear frames using 3D printing technology is revolutionary and with increased wide adoption and latest emerging innovations, is set to change the landscape of manufacturing.

### BENEFITS OF THE ENGAGEMENT

Espy & Iris' collaboration with Nimbus exposed the company's staff to the relevant technology and explained what needs to be considered to realise a high-quality 3D print.

The company is now better informed on whether to take on in-house design and production work by investing in an industry-grade printer or to partner with existing local production and manufacturing companies to assist with their proprietary eyewear designs.

Along with technical research, Nimbus provided the client with 3D printed eye-wear frames using various technologies and methods to outline the process from 3D modelling right through to post-rework.

**"The findings and recommendations from this study have been very informative and have opened several possibilities for us to consider when moving this project forward. It was a pleasure to work with the Nimbus team on this successful project and we look forward to future collaborations within the MTU family. We highly recommend the Nimbus Centre to companies looking to explore technical feasibility studies."**

- Christine Brosnan, Co-Founder, Espy & Iris.

**Contact us to connect your Enterprise with MTU. Email us at [extended.campusCork@mtu.ie](mailto:extended.campusCork@mtu.ie) to discuss a collaboration to suit your needs!**