

SAVE TIME AND MONEY WHEN YOU DEVELOP NEW FOOD PRODUCTS!

Computer Graphics Lab can develop digital food prototypes that accurately reproduce the appearance, texture and colour shades on both solid and liquid products



SAVE TIME AND MONEY ON FOOD DESIGN

We can develop digital food prototypes based on physical and mathematical data that reproduces the appearance, texture and colour shades accurately.

LIFELIKE COLOURS AND DETAILS

Computer Graphics Lab's special expertise is in the level of detail of the simulations. When we simulate the properties of e.g. fluids, we are strongly focused on drops behaving as they would in the real world. The simulations are based on real physical and mathematical data, so the final colour shade is completely lifelike.

TEST YOUR IDEAS!

With visual simulations you can test new ideas at low costs and accelerate time to market.

See more on cg.alexandra.dk



The digital drops are completely lifelike and behave just like in the real world!

Making food prototypes can be expensive and difficult – both for test and development of the product itself and with regard to marketing before or simultaneously with production. Therefore, Computer Graphics Lab develops software for visual analysis of material composition, for simulation of state-of-the-art material types and for improvements of traditional software for photorealistic image synthesis.

Using predictive rendering we create lifelike renderings of solid and liquid products. Predictive rendering is software algorithms that radiometrically and physically correct can simulate how products will look and behave solely based on shape and material composition.

Computer-generated visualisation makes food design less cost- and time-intensive because new products can be digitally tested and verified.

WE ARE AHEAD OF THE MARKET

Computer Graphics Lab's technology understanding develops in time with the latest research. This means that our software solutions are ahead of the market. For example, predictive rendering is not available in commercial software packages today. We develop solutions specifically for each project.

Our team consists of Masters and PhDs within computer science and quantum physics, and our professional focal points include photorealistic rendering, medical simulation, visualisation of large data sets, acceleration of data-intensive computations on modern graphics processors and physics-based animation. Across technologies we also work with user involvement in the development of our solutions.



DIGITAL PROTOTYPES ON THE LAPTOP

InnoMate is a tool for digital prototyping aimed at designers and material manufacturers. InnoMate can predict the appearance of a finished product by specifying the shape and material. The material is retrieved from a database that contains very precise descriptions of how light is reflected on each material. Material producers can continually update the database with their own materials. InnoMate makes use of the latest technology within cloud computing, which means that the user can use a small laptop or tablet with Internet connection.

DIGITAL JUICE AND MILK

Food manufacturers as Dupont assess various properties of food products using human senses – a so-called sensory panel. Many of the measurements are visual – e.g. up to 80% of the questions on yogurt are visual. In collaboration with Dupont, Computer Graphics Lab has developed digital simulations of the visual properties of a variety of food products, providing sensory panels with new tools for assessing food prototypes. As a more precise frame can be defined for the subjective human measurements, a higher quality of the measurements is also ensured.



CONTACT US IF YOU WANT TO KNOW MORE

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