

Toon Stuyck

Education

2017–2018 **Masters of science, Management**, *KU Leuven*, Leuven.

2016–2018 **Masters of science in engineering, Mathematical Engineering**, *KU Leuven*, Leuven.

Relevant courses:

Fundamentals of Computer Graphics, Wavelets, Computer Graphics 2, Pattern recognition and Image Interpretation, Parallel Computing, Deterministic and stochastic integration techniques, Optimization, Numerical simulation of differential equations

2012–2016 **Bachelor of science in engineering, Computer Science**, *KU Leuven*, Leuven.

Experience

2017–2017 **Research intern**, *Diabatix*, Leuven, Belgium.

(10 weeks) Development of a module for shape optimization of flow and cooling systems based on adjoint optimisation. This module is able to modify the shape of an object in order to minimize a certain objective function. The objective function, e.g. minimal pressure at the inlet, can be chosen freely by the user. Besides the freedom to choose different objective functions, the method is also able to satisfy geometric constraints.

2016–2016 **Research intern**, *Sioux LIME*, Eindhoven, Netherlands.

(8 weeks) Realization of a 3D realtime scanner for a persons teeth and gums or denture. I have investigated different methods for quick and accurate normal and curvature computations. The final method was able to correctly calculate the normals of point clouds with up to 5000 data points in milliseconds.

2015–2015 **Engineering internship**, *Kaneka Belgium NV*, Westerlo-Oevel, Belgium.

(3 weeks) Helped maintain the database and helped with debugging of code.

Languages

Dutch Native language

English full professional proficiency

French limited working proficiency

Computer skills

3D Modeling Blender, Maya
Software

OOP Java, C++, Python

Parallel MPI, OpenMP
Programming

Scientific Fortran, Matlab, Maple
Software

CFD OpenFOAM