

Master thesis: Generative AI and CAD design

The toolbox for the modern design engineer (CAD, FEM, PLM, etc) has been very capable for many years now and it has historically centered around detailed decisions and modeling made by the engineer. However, with the recent developments of AI tools during this year (2026) the toolbox is rapidly extending in many different directions which impacts how a product can be designed and manufactured. Some of these changes are very good and helpful while others are destructive and dangerous.

That's why we at SkyMaker want to investigate how the new AI tools can (and should) be used as part of the engineering toolbox to enable design of products to be manufactured on-demand and customizable.

At SkyMaker we develop the configurator builder platform DynaMaker (dynamaker.com) where engineers can build their own CAD configurators and publish online. DynaMaker helps companies transition from traditional discrete manufacturing in advance to mass customization and local on-demand manufacturing by making customized orders correct from the beginning.

Potential areas to build a master thesis around:

- Concept for spec driven design (where CAD geometry is just the output)
- How to automatically generate lightweight representation of existing CAD files
- How to design a product and while leaving the manufacturing details to an AI and it's manufacturing site (distributed manufacturing)

The master thesis will be performed together with our engineering team at our office in Linköping. We would prefer having two students working together on the master thesis and there will be a compensation of 25 000 SEK / person.

Read more at skymaker.se/student and send your application to exjobb@skymaker.se

