DeepForm

Job title	Simulation Engineer
Salary	£30,000 - £50,000 per year

Role Summary

DeepForm Ltd is an early stage start-up company introducing patented sheet metal pressing technology which significantly reduces waste, cost and embodied CO_2 emissions in the high-volume manufacturing of sheet metal components. DeepForm optimises material use by reimagining metal sheet forming tooling.

We are an exciting University of Cambridge spin-out company founded in 2022. Having secured external investment and formed a strategic alliance with a well-known automotive manufacturer we are securing our first customers. This is an exciting time to join at the very early stages in the company's mission to reduce waste and embodied emissions in the manufacturing sector.

You will join a small, dynamic team based in Cambridge, UK and will have responsibility for designing press forming processes for automotive and other clients. Using DeepForm's patented methodology, you will design and optimise transfer, tandem and progressive-die forming press tool layouts to maximise material utilisation. Designs will be tested using AutoForm forming simulation package.

Together with the DeepForm team you will identify opportunities and requirements for further innovation, and will contribute to finding solutions to new challenges such as new part geometries or materials.

Key Responsibilities

Carrying out DeepForm forming feasibility assessments, you will	**40%**
• Use DeepForm® tool design methodology to configure design layouts for first-stage forming operations • Use CAD software package to design tool surfaces (SolidWorks or CATIA) • Use AutoForm metal forming simulation package to predict process feasibility	
Designing full DeepForm pressing process layouts, you will	**30%**
• Use CAD and simulation software, to design any post-forming trimming, piercing, flanging, restriking operations that may be required • Communicate process layout using standardised process sheets	
Presenting work to customers and project management	**10%**
• Present simulation results and progress updates to clients, via written reports and presentations	

• Manage working relationships with points of contact in client's stamping and design teams, ensure that project delivery remains on track	
Identifying requirements for process innovation and contributing to solutions	**20%**
• Identify any issues that cannot be resolved using current DeepForm design methodology and IP • Contribute to the proposal, testing, and evaluation of solutions, including new patent applications	

Person Profile

This section details the knowledge, skills and experience we require for the role.

Background and experience	You will likely have a Mechanical Engineering degree or have completed an Engineering Apprenticeship to level 6/7, or equivalent. You enjoy and have proficiency in using CAD packages.
Flexible and motivated to support rapid growth of a new business (Essential)	Independent, self-starter who knows when to consult when key choices/decisions are to be made. Flexible approach to working in an exciting small team with developing formal structures
Experienced in using Finite Element Analysis to improve and evaluate designs (Essential)	2 years' experience in Finite Element Analysis ideally for metal forming applications, including software packages such as AutoForm, PAM-Stamp, LS Dyna, ABAQUS. Evidence of using modelling of a manufacturing process to allow design iterations to reduce the risk of failure Skill in testing and validating modelling predictions
Excellent communication with customers (Essential)	Able to create professional written and visual reports that communicate technical information to customers Able to present ideas professionally – both in structured presentations, and verbally - to a customer Recognise and respond to customer feedback
Project management (Desired)	Able to manage customer projects, including setting up suitable meetings, reviews etc. to ensure projects are delivered on time and within budget Able to manage own workload to ensure commitments to customers, and colleagues are met

Location	ideaSpace City, 3 Laundress Lane, Cambridge, CB2 1SD
Working pattern	Full time Office-based, with some flexibility for hybrid working
Benefits	Share option scheme

	Pension scheme (up to 5% matching)
	25 days annual leave excluding bank holidays
	Office located in centre of Cambridge

Application process

- Send your C.V. and cover letter to: hiring@deepform.co.uk
- Applications close: 10 May 2024 at 12noon BST
- Face to face interviews will be held in Cambridge, UK during the week 20-24 May 2024