



Software Engineer Simulation

Our Mission

We are a Munich-based seed-stage startup and develop a first-of-a-kind deep-tech medical software. It will assist physicians to find the best possible mechanical ventilation treatment for individual patients – wherever, whenever. Ebenbuild leverages medical images of a patient and further physiological data and combines them with in-depth physiological knowledge, engineering, and physics-based algorithms to create a personalized digital twin of that particular patient. Our motivation: Enable unprecedented insights and tailored precision treatment options. Our goal: Improve the odds for recovery and survival of millions each year.

The Opportunity

We want you to join our early-stage startup. As an integral part of our team, you will harness your coding and general problem-solving skills to ...

- ... conceptualize and implement novel computational methods to replicate different (patho)-physiological processes of the pulmonary system in silico
- ... develop model calibration techniques to personalize and update computational lung models with available clinical data
- ... work with clinicians to validate your hypotheses, algorithms, and models in a clinical setting
- ... work with an interdisciplinary team to translate state of the art research as well as your own ideas into product features enabling ICU-physicians to make better decisions
- ... take on new tasks and responsibilities as they arise in early start-up life
- ... and play a key role in building the company's technological foundation

How you'll enhance the Ebenbuild skillset

- Ph.D. in the field of Computational Mechanics or related discipline
- Proven track record of developing novel methods to solve challenging multi-physics and/or biomedical problems
- Proven ability to translate novel methodological ideas into reliable, efficient, and high-quality code
- Proficiency in high-performance, object-oriented programming in C++, additional knowledge of Python is beneficial
- Experience with MPI and Trilinos is helpful
- Experience with model calibration techniques is a plus
- Very good written and verbal communication skills in English. German is a plus
- Good engineering skills with regard to tools like Docker and Git

Perhaps most importantly, this position requires grit and a certain dose of **“Abenteuerlust”**.

Why Join us

- Build products that will have a measurable impact on the lives of patients.
- You will face *very complex* and *technically challenging* problems. Be the first to solve them!
- You will be working with a modern and high-end software stack and infrastructure
- We are an interdisciplinary team of highly motivated, skilled and ambitious people. Individual contributions count...a lot!

Want to get started? Reach out to us and send your application to jobs@ebenbuild.com. We are looking forward to getting to know you.