

K I T E // K R A F T

Vacancy: Electronics Engineer (m/f/d)

Full Time, on-site in Munich, Starting from Jan. 2024

Kitekraft GmbH, Munich, Germany



What We Do

Kitekraft is developing advanced wind power systems: power-generating kites, a.k.a. flying wind turbines, that require 10x less construction material than a conventional wind turbine. A Kitekraft unit will generate electricity cleaner, almost invisible, and will be 50% cheaper than conventional wind turbine of the same power rating. Kitekraft develops and will build, sell, and operate flying wind turbines in the 100kW to 5MW+ range, for both grid-scale energy production and off-grid applications. Further information: <http://www.kitekraft.de>

Why We Do What We Do – Our Mission

Our mission is to help solving the climate and energy crisis. Today still 84% of primary energy comes from fossil fuels. All that has to be replaced with renewables. Electrification of most sectors is in full swing, additional capacities are required for production of e-fuels and hydrogen for transportation, especially shipping and flying, but also for CO₂-neutral steel production and more. We have to at least 10x the current renewable energy capacities. Wind energy will be a backbone of this because of its scalability and availability over the globe. Our flying wind turbines will accelerate adoption and provide a major portion of this since it is cheaper, feasible at more locations, simpler to deploy & maintain, and being less visible.

Why Join Us

- Work on exciting topics and challenges relevant to solving the energy and climate crises.
- Tackle unknown challenges and deliver something that has never been done before.
- Be at the center of an agile and dynamic team of highly motivated aerospace/wind energy/climate-tech enthusiasts.
- Huge learning potential and the opportunity to build things from the ground up.
- You'll enjoy a high level of freedom and autonomy.
- Flat hierarchy and open communication.
- Be one of the first employees of a startup company. You can help shaping it and growing with it.

Your Mission at Kitekraft

You will take responsibility for all electronics – signal electronics and power electronics – of both the kite and the ground station. You will select, commission, and test appropriate off-the-shelf components (sensors, power electronics equipment, etc.) and design custom PCBs (concept, simulations, schematics, component libraries, CAD, BOM) as needed and manage the entire PCB development (order, debug, write low-level-code, manage stock etc.). You will design and manage functional tests, integration tests, longevity tests, and help conducting and managing flight tests incl. fault isolation and debugging in the field. You will work on test bench setups, kites and ground stations with increasing sizes (2.4m wingspan now towards 10s of meters of wingspan), power levels (~10kW now towards MW+ soon), and voltage levels (~1kV now towards ~4kV soon). You will document your work and implement improvements as needed and uncovered. You work closely together with the Kitekraft founders and all other team members, particularly with the mechanical engineers (such that all electronics are mechanically,

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thermally, and power-wise sized correctly and effectively) and with the software engineers (such that the electronics are correctly and effectively controlled and monitored by the kite flight control algorithms). You will help building new kite, tether, and ground station prototypes and demonstrators and help mature those to sellable products. You will work on ad hoc related tasks or projects as needed, also outside of your main field. As Kitekraft grows in the future and you are the first hire in electronics, you will have the opportunity to grow a team.

Who You Are and What You Bring – Requirements

- BSc/MSc/PhD in electronics engineering or comparable.
- Proven capability of solving hard problems in electronics either through years of working experience or very compelling MSc/PhD thesis – you are one of the best of your field with exceptional skills and talent.
- Strong knowledge and experience in analog and digital electronics, semiconductors, power electronics, good practices/standards in electrical wiring, PCBs, EMI, insulation, shielding, and related topics.
- Proficient in using solder irons, heat guns, oscilloscopes, multimeters etc.
- Good knowledge of CAD systems like KiCAD; proficiency in KiCAD is a big plus.
- Deep knowledge of power electronics, especially in the field of Dual Active Bridge and related resonant topologies is a big plus.
- Fluent English and German.
- You have a sense of urgency to get things done to combat climate change and the energy crisis; driven to deliver and constantly push the boundaries; can do attitude; determination and high expectations of yourself and your team.
- Humble and willing to go out of your way to help others; take ownership and accountability for your own actions and mistakes; passionate about technology and curious and eager to learn.
- High level of self-reliance with the ability to work in a team as well as autonomously.
- Excellent communication skills and motivation to help building structures and processes within the Kitekraft company while we grow is a plus.
- You will always act with safety and integrity in mind.

Equal Opportunity

Kitekraft is an equal opportunity employer. We are open to all groups of people without regard to age, color, national origin, race, religion, gender, sex, sexual orientation, gender identity and/or expression, marital status, or any other legally protected characteristics. Further details: <https://www.kitekraft.de/about#code-of-conduct>

What to Expect from the Selection Process

1. Send your CV and letter of motivation to work@kitekraft.de. Keep your letter of motivation short (max. 1 DIN A4 page with normal borders and font size), tell us concisely and with past examples why you can fill this vacancy best and fulfill the requirements. Tell us your hardest ever encountered challenge and how you solved it. Possibly include references to support your application.
2. If your profile matches our needs, you will be contacted in a few weeks by us to schedule a video-call interview. (Note: Due to high volume of applications, we cannot get back to all candidates. If you have not heard from us within 4 weeks, please consider that your application has been unsuccessful for the current openings.)
3. In case of positive outcome, you will then attend 1 to 2 in-person interviews and possibly a few test work hours or test workday. You will get to know your potential future colleagues. We will introduce you to the company, to our technology developments, and to the challenges to be solved in case you are selected. We will ask you how you would approach those challenges.
4. In case of a positive outcome, you will receive an offer and onboarding.