

# Electronics Engineer

£30-60k depending on experience

We make wearable location and activity trackers for dogs. No, we're not barking mad. We're developing the technology and consumer products that could help every dog owner (13 million in the UK alone) keep their dog healthier. It's big business, and we're the UK's clear leader in this growing space, with tens of thousands of dog owners already using our innovative devices, friendly app and sophisticated cloud services every day. And boy do they love us!

Based in central Cambridge (near the station), our engineering team of around twenty people creates almost all of our technology in-house. It's not easy. In fact, it's really hard, but we're smart, we work fast and we have fun. And now we're looking for new people who'd like to join us and do the same.

## Here's what you'll DO

- Work alongside our experienced engineers to develop electronics designs from the ground up.
- Work on our next generation products, production line test kit, and more!
- Prototype creative ideas, including your own concepts: innovation is built into our culture.
- PCB layout including multi-layer routing, RF paths and fine-pitch BGA parts.
- Hands-on soldering for prototype development and rework down to 0201 and occasionally small QFN or simple BGA parts.
- Design from a data-driven perspective using calculation and simulation, with an approach towards efficiency, reliability and cost.
- Ask the right questions and influence decisions.
- Ensure that the technology performs well, and meets the requirements of the end users.
- Work in a team that has a keen focus on personal development, you will be given the time to learn within our sprints.

## Our TECHNOLOGY

- Our wearable devices are based on groundbreaking electronics developed in-house, where we value paying attention to every detail. Devices with the best performance, reliability and cost.
- Our devices are based around low-cost ARM (M33, M0) processors and incorporate a wide range of technologies such as GNSS, Bluetooth, mobile cellular communications, Qi wireless charging.
- On-device embedded software is running in a Zephyr operating system.
- Our production line test kit is all developed in-house and each one uses a variety of different technologies. We've used all kinds of sensors, pneumatic systems, and more!
- We're continually looking for new and better ways to put our team in charge of how we develop our hardware, electronics and code in the most productive and robust ways.

## The TECH SKILLS you'll need

You don't need to have every skill here, but the more the better! As we're a small team, you'll have the opportunity to get your hands dirty working on anything and everything. We're looking for experience of:

- Whether it's from home projects or your career, you'll need a broad range of experience in electronics:
  - Microcontrollers, system-on-chips.
  - Various peripheral communication protocols like SPI, I2C.
  - Power circuitry including battery management, switch-mode regulators etc.
- The debugging and problem solving skills that come with developing all the above.
- Experience in or a strong attitude towards designing for low power consumption and low cost.

## The SKILLS it would be nice to have

- Knowledge of C.
- Source control (e.g. Git).
- Other electronics or hardware related skills that we haven't mentioned; you never know when they might come in handy for our next product or piece of test kit!
- Experience in RF and antenna design would be a great bonus.

## OTHER SKILLS you'll need

- People who get stuff done. We can't overstate this. We ship working software to real users in a fast-moving market that works in dog years (that's 7x faster)!
- Attention to quality. We can't overstate this either. Hardware takes a long time to change, so we have to get it right the first time.
- Commercial and user nous. Sorry, it's not enough to be a technical wizard. You also need to understand why we're doing it, and appreciate what makes our users tick.
- Independence and teamwork. Yes, both. We need people who can work unsupervised by themselves on one day, and as a part of the pack the next.
- Clear thinking under uncertainty. We live in a complex world and we don't always have all the data. We need people who can fill in the gaps and imagine the whole picture.
- A "can do" approach to life. If something looks hard – impossible even – we still try to find a way to do it, or something very like it. See also "get stuff done" above.
- And it would be great if you owned a dog!

## What we OFFER IN RETURN

- The chance to see your work in the hands of tens of thousands (sometimes hundreds of thousands) of real users (dog owners!).
- An incredibly supportive and friendly team that believes in listening to everyone's ideas and helping everyone to do their very best job.
- Ability to develop and grow in responsibility, with the backing and support of experienced engineers.
- The opportunity to kick start or grow your career through our commitment to on-the-job training and our fortnightly "hack Friday" sessions.
- Fully-flexible working based either from our easy-to-get-to office (bring your dog if you like) or from your home, or both. As a hardware person, it makes a lot of sense to be in the office to access tools in the lab so keep that in mind. The hardware and firmware teams will be in the office most days.
- The chance to be part of a successful tech scale-up, and to see from the inside what makes a fast-growing business like ours succeed.
- A fun and sociable culture with lunchtime BBQs in our garden and regular out-of-hours events.

## How to APPLY

We'd love to talk to you, and there will be lots of people wanting to talk to us. But we can't talk to everyone. For the best chance, we'd love you to send TWO things to [talent@pitpatpet.com](mailto:talent@pitpatpet.com):

1. Your CV.
2. A **brief** email mentioning how your previous experience would help you make the best contribution to our team according to the "What we NEED" section above.

In return, we promise to reply letting you know whether we'd like to take the conversation further. And if we do, and you have a dog, don't forget to ask us for a PitPat with our compliments. :-)

Good luck!