



Midsummer Energy Ltd
Cambridge Road Industrial Estate
Milton
Cambridge
CB24 6AZ

Application pack - Graduate Developer

At Midsummer, we're passionate about reducing carbon emissions, and from humble beginnings we have grown to be one of the biggest players in the UK in the distribution of renewable energy products such as solar PV, battery storage, and heat pumps.

Much of our growth has been driven by Easy PV, the design software we have developed that makes it extremely easy to design and specify solar PV systems. It's the most popular PV design software in the UK, with more than a million projects created. We're replicating that model in the nascent market for heat pumps with our heat pump specification tool, Heatpunk. There are huge opportunities (and challenges) ahead as we extend the capability of our existing tools and build new ones.

We're expanding our software development team, and we're looking for a couple of bright, enthusiastic, budding developers to join us - people who would like to put their software skills to use to build a greener future.

Working at Midsummer will give you an opportunity to work in a friendly, growing company that is playing an important part in the energy transition. We hope we have piqued your interest. Read on for more details!

Andy Rankin,
Managing Director, Midsummer



The role



You will join our software team, working on the next generations of Easy PV and Heatpunk, our web tools for designing PV and heat pump systems.

As a Graduate Developer you will be given the opportunity to try your hand at all aspects of software development. Some of the areas you will work in are:

- **Front end code.** You will work with our designer to implement our design system, ensuring users have a clean, pleasing, easy-to-use UI.
- **Complex user interfaces.** Much of the magic in Easy PV happens in 2D and 3D graphical editors. You'll need to get your head round complex geometry problems.
- **Back end code.** We are in the process of migrating our back end from PHP to node.js, with some Python and Rust modules for particular tasks. Some of our back end is routine work with databases, file storage and connections to external services - some of it is a lot more bespoke and esoteric!
- **Testing and infrastructure.** Our customer base is rapidly expanding, with a number of 'Enterprise' implementations of Easy PV and Heatpunk for large installers and energy companies in addition to our public sites. We have to manage ever-increasing volumes of data and ensure new features are thoroughly tested in different environments before deployment.
- **Problem solving.** Some of what we do needs solutions to complex mathematical and logical problems - you'll need to be a great problem solver.

The role is based in our offices in Milton, on the outskirts of Cambridge.



About you



You're naturally talented at coding, thoughtful, and creative, and you want a career that will make a difference. You'd like to put your skills to use to make the planet greener as well as earn your keep.

You've got a passion for good code and would love to spend your days building software that is intuitive and enjoyable to use.

The main characteristic we are looking for is excellent problem solving. Software development is evolving rapidly, and AI coding assistants can now do a lot of the grunt work. These tools are only as good as their operator however, and you need to know how to get the best from them, and how to solve the problems that they get stuck on.

We value initiative. We like people who can work independently, take pride in what they do, and don't need to be micro-managed.

Not everyone has to be a generalist, and you might already have a clear preference for front or back end coding. For front-end developers an eye for good design is a big advantage. You need to build an understanding of how users interact with our software, and develop tools that are not just pleasing to the eye, but that are intuitive, feel natural, and a pleasure to use. For back-end developers we look for attention to detail, common sense and security awareness.

The post is particularly suitable for recent graduates or those about to graduate, but we are open to applicants who are changing career or have a small amount of prior experience in coding.



What we offer



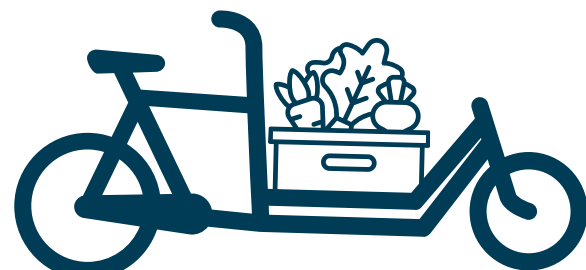
You'll be joining a young, dynamic company with positive values that is aiming to position itself as the leading distributor of renewable energy systems in the UK. As a software developer you will be joining a division that we see as crucial to the success of the company, and with enormous potential for growth. This will be a challenging but fulfilling role.

The position is based in our offices neighbouring Milton Country Park on the outskirts of Cambridge. We are open to some degree of flexible working - and there are times when working from home can allow you to get your head down and complete tasks free from distractions - but we believe it is best to see our colleagues face to face on most days so you will be expected to be based in the office at least four days a week.

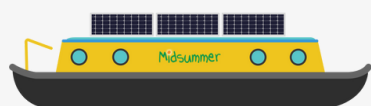
Starting salary is usually £38K for our graduate developers. If you have some experience or relevant high level academic qualifications (eg a PhD in a relevant field), a slightly higher salary may be negotiable.

You won't get a company car - we'd rather encourage people to get on their bike or take public transport. But you do get a free bag of delicious, fresh, locally-grown organic veg every week.

We can be flexible on start dates. We are open to a summer start for candidates who are completing their studies at the moment.



Our Story



2005



2015



2023

Midsummer began life in the front room of a narrowboat, when our founder started selling solar panels to fellow boaters.

Sticking to our roots

We've grown through 7 ever-larger warehouses since then and diversified what we do - but an important part of our business remains the supply of off-grid systems to customers who need power away from the national grid.

Growing branches

With the introduction of the Feed-in Tariff in 2010 we began installing and supplying larger grid-connect solar PV systems. Today, the distribution of solar PV and battery storage accounts for the majority of our > £100M annual turnover.

Planting seeds

In 2019 we opened a subsidiary on the outskirts of Dublin. Our team have gone from strength to strength, and have just moved to a larger warehouse. We have since opened another satellite warehouse in Glasgow.

Software - the secret of our success

We've written our own PV design software that makes designing solar power systems incredibly easy. It's used by installers and manufacturers in the UK and internationally.

We're developing software for designing heat pump systems too. Heat pumps are the future of heating, and we want to be at the forefront of their deployment in the UK. They will be an important part of the next chapter of our story!

Our values



It has never been our aim simply to make a profit. We want to make a positive impact on the world around us too. This is what we stand for.

Eliminating fossil fuels

We are passionate about moving as swiftly as we can to eliminate fossil fuels from electricity generation, heating and transport. We only sell products and systems that further that aim.

We are also working to reduce fossil fuel use in our own operations. We have solar arrays on our Milton office and our warehouse in Glasgow. We help our employees to keep their own footprints low by encouraging cycling and walking over car use.

Reducing consumption

Over-consumption is at the heart of many of the environmental problems that the world is experiencing. Most businesses operate a business model which is designed to encourage consumption. We want to be different.

We sell solar PV systems that greatly reduce the amount of energy that properties need to import, and we sell heat pumps that use less primary energy (and from less damaging sources) than the fossil fuel based heating systems that they are replacing.

We don't sell disposable items. All the products that we sell are designed to last for many years. Many of the solar panels we sell have a 30 year warranty.

We try where we can to reduce consumption in our own operations. We re-use a lot of the packaging that products arrive in.



Putting people and planet before profit

We believe that businesses have a bigger responsibility to the planet, and to their employees and the communities they operate in, than they do to their shareholders.

We are a successful business. Some of our annual profit is returned to our employees through a staff profit share scheme. We also have a community fund which donates to socially beneficial and sustainable projects in the community. Almost all the remaining profit is reinvested into the business - very little is paid out in shareholder dividends.

We believe in reducing the gap between rich and poor. We pay well over the living wage to all our employees, and our profit share scheme is equitable, so that all employees, from the most junior to the most senior, share equally in the rewards when the company does well. For senior staff we aim to pay competitive salaries, but we don't believe in excessive executive pay.

We believe healthy employees are happy employees. We work with local organic growers to provide all our employees with a vegetable box each week.



Leadership team



Andy Rankin

Founder

A former climate scientist who started a solar company from his off-grid home 15 years ago. Andy likes to build things from scratch, whether that's companies, houses, solar farms, software or freight bikes.



Jamie Vaux

Commercial Director

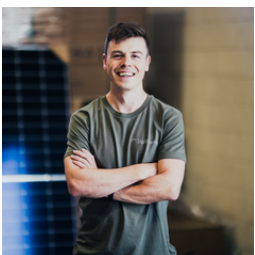
An environmental business enthusiast who went looking for a company to throw his idealism at, Jamie has spent 10 years chasing sales and building the Midsummer team. Out of the office you'll find him lifting something heavy or cooking.



Lowri Goodyer

Sales Director

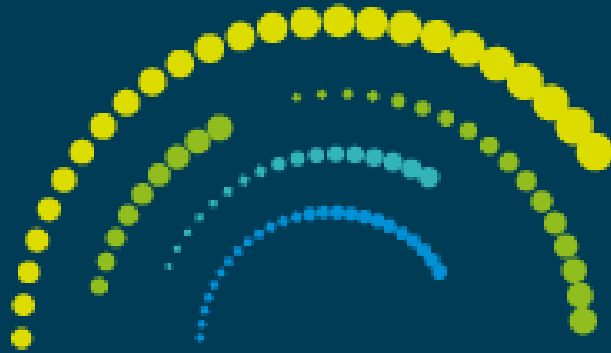
A fellow eco-crusader, Lowri heads up UK sales - and can be found climbing, surfing, running, snowboarding or gardening when she wants a rest!



Tom Kemsley

Scotland manager

Tom joined our graduate scheme green out of university. Although he subsequently tried to escape, even in New Zealand he found the magnetic pull of Midsummer drawing him back. He heads up our office in Glasgow.



MIDSUMMER

"I can't imagine a job I'd love more or a company I could be more committed to. Every single day we're moving renewables forward and I'm surrounded by a great bunch of people helping to do it."

Jamie Vaux, Commercial Director



Easy PV

Solar design made simple

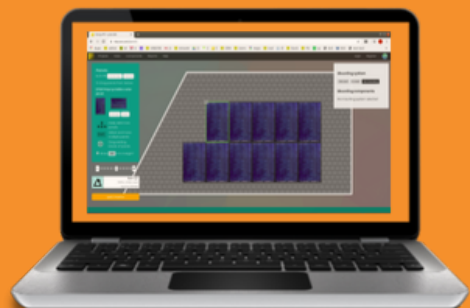
We used to install solar PV systems ourselves - and found that we had to use 5 or 6 different software packages to complete a full design.

Every mounting system, every inverter brand, had their own design tool - and then you had to use spreadsheets and word processors to pull everything together and create a nicely formatted quote.

We shoehorned a design package together that did everything - and saved ourselves a lot of time and wasted effort!

When we gave up installations to concentrate on distribution, we realised our design tool was actually one of our greatest assets. We put a huge amount of effort into improving it and making it available to our distribution partners. It's now used by hundreds of people every day to design PV systems. And because it connects seamlessly to our e-commerce website, it makes it easy for users to purchase from us. We have seen our sales grow enormously as a result.

- Creates 3D model buildings from detailed elevation data and aerial imagery
- Automatically create solar array layouts
- Designs the mounting system and undertakes structural calculations
- Selects appropriate inverters and undertakes stringing calculations
- Specifies electrical components
- Creates a schematic
- Produces shading & yield calculations
- Generates a professional quote and technical report
- Undertakes financial projections
- Auto-completes commissioning forms
- Connects to our websites for rapid ordering



30,000

designs a month
(and growing rapidly)

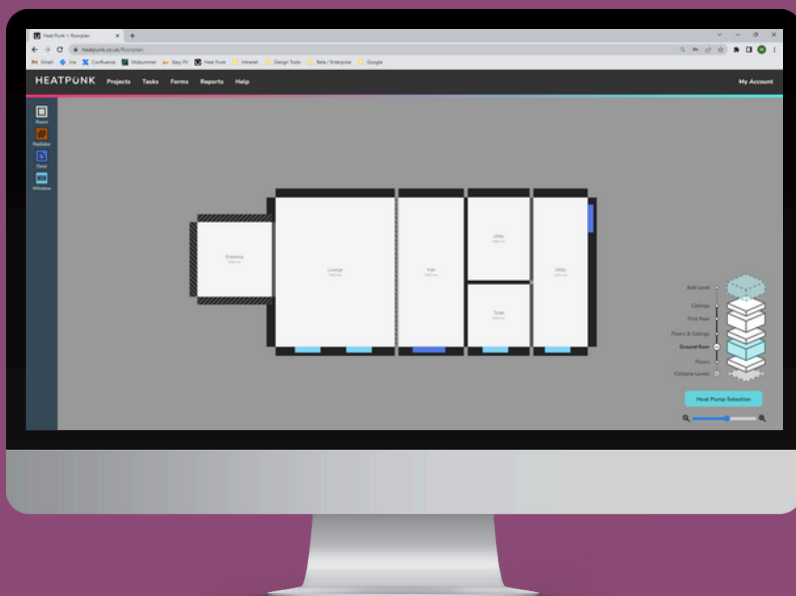
easy-pv.co.uk

HEATPÜNK

We've recently released a new tool that allows installers to survey properties and design heat pump systems.

Building on the web technology we used to create the roof editor for Easy PV, we've created a floorplan editor that makes it extremely easy to draw a house to scale and undertake detailed room-by-room heat loss calculations.

The software automatically selects the optimum heat pump and shows which rooms may need upgraded radiators to work at the relatively low flow temperatures that a heat pump produces.



Heat pumps are the future of heating, We're at the beginning of a transformation of the entire heating industry, and our software will be a big part of that. There are exciting times ahead!

heatpunk.co.uk