

Full Stack Engineer

Location: flexible (US time zones), some preference for Boston

Type: full-time, early technical hire

Why Upgraid exists

Buildings are the world's largest asset class, consume ~40% of energy globally (and generate the same share of greenhouse gas emissions), and shape the way we live, work, play, and interact. They are foundational to human societies. There are billions of them, from skyscrapers to data centers, malls, warehouses, and single-family homes.

Hundreds of millions - perhaps billions - of these buildings would benefit from upgrades. These upgrades would reduce energy costs, improve health, and create more attractive spaces for residents, consumers, students, patients, and more. But the way building upgrades are done today is archaic. Physical inspections, owners with no understanding of the systems in their buildings, and expensive manual energy audits of variable quality make the old way of doing things untenable.

Instead, imagine if every building could tell you exactly how it wants to be upgraded — what to fix, what it would save, and how fast it pays back. That's what we're building. Our AI model reads the built environment from space, runs advanced energy simulations, and delivers a ready-to-pitch upgrade proposal for every property. It's how we will accelerate building upgrades globally.

Who we are and where we're at

Our experienced founding team includes a former McKinsey partner and leader of built environment sustainability, an experienced product leader, and an MIT building scientist. We have rapidly closed our funding round, have advisors who have built companies from zero to IPO and senior leaders from the industry. We have recently been accepted to Greentown Labs, the world's leading climate tech incubator. We have paying customers who consider our product a quantum leap in how building upgrades are done. We are going places fast and would like incredibly bright and talented people to join us.

What you'll help build

As a founding Full Stack Engineer, you will be an "all-around player" responsible for the end-to-end user experience and the evolution of our analytics platform.

- **Customer-Facing Interface:** Help design and build the interface where customers explore building data, view energy simulations, and act on upgrade recommendations.
- **Data Pipelines & Integrations:** Connect and normalize data from diverse sources (satellite imagery, utility records, building permits, economic data) into a unified format our models can use.
- **API Development:** Extend our FastAPI backend to serve new data products and support frontend features.
- **Simulation Workflow:** Contribute to the asynchronous job systems that run energy simulations at scale across thousands of buildings.

Day-to-day (Your First 90 Days)

Month 1: Orientation & UI

- Get up to speed on the core stack (Python, FastAPI, PostgreSQL, AWS).
- Take ownership of your first front-end components and ship a customer facing feature to production.

Month 2: Start getting into the backend and data pipelines

- Extend the API to support new data visualizations and customer workflows based on customer feedback and input
- Wrangle messy datasets: cleaning, formatting, and integrating sources that may require custom web scrapes, pdf parsing, etc. across different location granularities (e.g., county, state, federal)

Month 3: E2E ownerships

- Own a feature from API design through frontend deployment.
- Contribute to the feedback loop: how we ingest customer input and use it to improve outputs.

In 6 months, success looks like

- You have a **deep understanding** of our full analytics platform and can navigate the codebase with confidence.
- You are **shipping high-quality code** across the entire stack, from frontend components to backend logic and AI integrations.
- **Engineering velocity is high** because you are a proactive problem solver who can unblock yourself and others.

The kind of problems you'll enjoy

- **Data normalization:** Buildings don't come with clean datasets. You'll figure out how to reconcile mismatched addresses, incomplete utility records, and inconsistent permit data into something usable.
- **Making dense outputs legible:** Energy simulations produce a lot of numbers. You'll build interfaces that help non-technical users understand what matters and what to do next.
- **Fast iteration with real customers:** We work directly with our users to improve our products, and want to ensure we are always developing new features that align with their vision

You might have done some of this

- Built and deployed web applications using Python and a modern JS framework (Svelte, React, Vue, or similar).
- Designed REST APIs and worked with relational databases (PostgreSQL or equivalent).
- Wrangled imperfect data—cleaning, transforming, or integrating datasets from multiple sources.
- Shipped something end-to-end, whether through internships, personal projects, or open-source work.
- CS degree or equivalent experience (new grads welcome!).

What makes this role special

- **Early team ownership:** You'll join an experienced founding team—a former McKinsey partner, a technical founder with deep energy expertise, and an experienced operator.

- **Greenfield + real traction:** We've proven the MVP and have paying customers—now we're scaling to thousands of buildings.
- **Surface area that matters:** Every feature you build directly contributes to bending the curve down on global emissions.

What we value

- **Intellectual Curiosity:** A desire to learn the "why" behind building energy systems and AI models.
- **Pragmatic rigor:** Measure, ship, iterate.
- **Low-ego collaboration:** Teach, learn, and write things down.

Compensation

- Competitive salary + potential for equity (early-engineer level).
- Flexible location/hours and the tools you need.

Send your resume and a short note saying why you're interested to:
Daniel Cramer at daniel@upgraid.us and Brodie Boland at brodie@upgraid.us