

Type d'offre : Corporate offer

Post date : 03.03.26

Formel AI

Applied Formal Methods Engineer

Informations générales

Contract length : CDI

Experience level : 3+ years of experience

Contact :

careers@formel.ai

Starting date : Wed 01/04/2026 - 12:00

Formel AI :

At [Formel AI](#), we combine the creativity of generative AI with the reliability of mathematical formal methods. By leveraging the verification capabilities of formal methods, such as the Lean 4, we pioneer a new generation of Large Language Models (LLMs) that are reliable, transparent, and cost-efficient. We're honored to have received the [2nd spot of the Innovation Prize from École normale supérieure](#) in Nov 2025.

Formel AI is founded by [Sylvain Combettes](#) (CEO) and [Antoine Mazarguil](#) (CTO), who met during their PhDs at ENS Paris-Saclay. We closed an [oversubscribed angel round](#) in Feb 2026, backed by 30+ top-tier business angels including the founders of Datadog, Dataiku, Nabla, and Artefact. Our scientific advisory board includes Full Professors from Ecole polytechnique, ENS Paris-Saclay, and Ecole des Ponts.

We're now onboarding our first design partners and building the team to make it happen. Come join us!

Address :

Formel AI
75000 Paris
France

Détail de l'offre (poste, mission, profil) :

About the role

We are looking for exceptional individuals to build the innovative bridge that will lead to the next generation of AI: the link between AI and formal methods. With this bridge, we are developing new LLMs that are completely transparent, and consume a fraction of the costs of current LLMs.

As an engineer with a strong background in formal methods, your position will be intrinsically challenging. At Formel AI, your role will be to participate in the development of new innovative methods and tools in various areas of interest.

Key responsibilities

- **Develop product features:** Build and ship production-grade features for our platform, working from backend APIs to UI prototypes using Python
- **Bridge theory and practice:** Translate cutting-edge research in formal methods and AI into practical applications, acting as the reference on complex technical concepts in the team
- **Stay at the forefront of AI and formal methods:** Monitor cutting-edge research in both domains, identifying emerging techniques and tools that could enhance our systems
- **Drive research innovation:** Actively shape the company's research roadmap, exploring new directions

verification in collaboration with our scientific advisory board

What we are looking for

Essential qualities

- **Curious and scientific:** You're passionate about exploring the intersection of AI and formal verification, with a curious and driven mindset that constantly questions and seeks to push boundaries
- **High technical skills:** You can autonomously design, implement, and deploy production-grade formal verification with AI, from prototyping to production
- **High theoretical skills in formal methods :** You have deep expertise in formal verification concepts and problem solving, with the ability to apply these concepts to real-world problems
- **Impact driven:** You excel at translating cutting-edge research into practical implementations that create real-world value, always keeping real-world applicability at the forefront
- **Bridge builder:** You thrive at building interdisciplinary bridges

Background

- **Advanced degree in formal methods or related field:** PhD or Master's degree in Computer Science or a related discipline with focus on formal verification, theorem proving, or program analysis
- **3+ years of experience:** Substantial professional or research experience applying formal methods
- **Industry or academic research:** Experience in either industrial R&D labs or academic research environments, applying formal verification tools and techniques
- **Track record of end-to-end product development:** Proven experience taking formal methods from concept through implementation to production deployment

Required skills

- **Applied formal methods expertise:** Demonstrated track record of applying formal verification to real-world problems
- **Theorem proving experience:** Hands-on experience with at least one interactive theorem prover (e.g., Isabelle/HOL, Lean, or similar)
- **SMT solver knowledge:** Strong understanding of SMT solver fundamentals and their practical application
- **Team-based product development:** Experience collaborating in a team environment to build and deploy formal verification solutions

software

- **Formal software development:** Proven experience developing formally verified software into software development workflows

Nice-to-have

- **Python proficiency:** Strong programming skills in Python for rapid prototyping and integration
- **OCaml experience:** Familiarity with OCaml or other functional programming languages
- **LLMs knowledge:** Understanding of LLMs from both theoretical and practical perspectives

Benefits

- Financial & perks

- Competitive cash salary and equity (BSPCE) in a high-potential company.
- Health insurance (Alan) for you and your family (partner and kids).
- Daily lunch vouchers (Swile).
- Hybrid work model with a strong emphasis on in-office collaboration (typically 3-4 days per week) to foster team cohesion, spontaneous discussions, and deep work together.

- What makes this role unique:

- **Founding team impact:** Join as one of the first employees and shape the trajectory of a startup.
- **Mission-driven startup:** Help solve the key pressing challenges of AI—the most transformative era—ensuring LLMs are trustworthy, transparent, and cost-effective, with direct benefits for end-users.
- **Work with cutting-edge technology:** Build systems that combine LLMs with formal verification, pushing the forefront of AI safety and reliability where breakthrough developments happen every week.
- **World-class team:** Collaborate with a scientific advisory board from leading institutions (e.g., Sorbonne, Saclay, etc) and experienced business angels from top tech companies (Datadog, Dataiku, Nuro, etc).
- **Strategic customers:** Work with leading companies in healthcare, enterprise software, and other domains.

- **Flexibility of an early-stage startup:** Autonomy to define how you work and what you work on.

Hiring process

1. Apply and submit your resume using this [Google Form](

<https://docs.google.com/forms/d/e/1FAIpQLSfvLZeeEiMIhtFWlmd2IbaQ9ghPhYw3r0nSRVHZeJb>
)

2. **Screening call (30 min)**: A quick chat with the CTO to align on vision and expectations.
3. **In-depth technical discussion** (home exercise followed by a ****60 min**** discussion)****:** great fit as potential collaborators.
4. **Technical deep-dive (60 min)**: A focus on your proficiency with the tools you will use.
5. **Founder interview (45 min)**: Final discussion on strategy, culture fit, and your long-term with the CTO and CEO.

URL de l'offre :

<https://docs.google.com/forms/d/e/1FAIpQLSfvLZeeEiMIhtFWlmd2IbaQ9ghPhYw3r0nSRVHZeJb>

Lien vers l'offre sur le site dataia.eu :<https://da-cor-dev.peppercube.org/node/1536>