Job Offer

Computational Geometry Specialist

deepmath solutions
www.deepmath.tech
1 Rue de la Noë, 44300 Nantes

Liad Paskin (Founder & CEO)
liadpaskin@deepmath.tech
(+33) 07 8109 7290

Bruno Tessaro (Founder & CTO)
brunotessaro@deepmath.tech
+(33) 07 6666 8026

We are deepmath, a deep-tech startup headquartered in Nantes, France, with operations in Brazil and strategic partnerships worldwide. We are pleased to open a **CDI** position for a **Computational Geometry Engineer**, starting **March/April 2026**, focused on building **robust geometry processing and large-scale dataset generation pipelines** to power our intelligent mesh generation technology. If you are driven by technical challenges and motivated to shape the future of engineering simulation, we invite you to apply and join our journey.

1 About Us

We combine cutting-edge techniques in mathematical modeling, physics-based simulation, and artificial intelligence to deliver accurate descriptions and predictions of physical phenomena. Although we support projects in wind, solar, and offshore energy, our main focus is developing next-generation engineering simulation tools, where advanced physics and AI converge to tackle demanding industrial challenges.

deepmath is building a diverse, healthy, and supportive work environment where creativity thrives. We believe that great ideas emerge when people feel respected, supported, and empowered. Our goal is to create the conditions for every team member to grow, express their strengths, and reach their full potential.

2 The Project

Engineering simulation has long faced a critical bottleneck: the generation of high-quality meshes, especially for Computational Fluid Dynamics (CFD). For decades, this process has remained largely manual, time-consuming, and dependent on expert knowledge, making it one of the main obstacles to the large-scale industrial adoption of advanced simulation tools.

Our project, deepmesh, addresses this challenge by developing an intelligent AI-driven mesh generator. By combining graph neural networks and transformer architectures, deepmesh learns to automatically produce simulation-ready meshes for complex geometries and demanding physical conditions. This technology enables faster, more reliable, and more accessible simulations, allowing engineers to focus on innovation rather than preprocessing, and laying the foundation for next-generation engineering design and optimization workflows.

3 Your Missions

As a Computational Geometry Engineer, you will contribute directly to the geometric and data foundations of our intelligent mesh generation system. You will design, implement, and optimize the geometry processing and large-scale dataset generation pipelines that power deepmesh. Your role covers procedural geometry creation, robust geometry handling, scalable synthetic data production, and the seamless integration of classical algorithms with modern machine learning models. Your missions will include:

- Designing and implementing geometry and mesh generation pipelines to produce large-scale, diverse, and simulation-grade training datasets;
- Building and maintaining robust geometry processing tools, including curve and surface handling, feature detection, healing, and topology-safe operations;
- Ensuring geometric validity, mesh quality, and numerical robustness of all generated training data;
- Integrating classical geometry algorithms with machine learning workflows, including feature engineering, constraint enforcement, and post-processing of model outputs;
- Collaborating with the AI team to translate geometric priors and domain knowledge into components that improve model reliability and performance within the broader deepmesh pipeline.

By joining deepmath at an early stage, you will be in a position to make a significant impact not only on the technical success of the project but also on the direction of our technology strategy and future developments.

4 Your Profile

Hard Skills:

- Graduate degree (MSc or PhD) in Computer Science, Applied Mathematics, Engineering, or a related field, with strong foundations in geometry processing and scientific computing;
- Solid experience with computational geometry and geometry processing algorithms (meshing, surface/curve manipulation, topology handling, spatial data structures);
- Strong programming skills in Python and proficiency with Linux environments. Experience with C/C++ or performance-oriented implementations is a plus;
- Familiarity with scientific or simulation workflows (CFD/FEM) and mesh quality requirements for numerical solvers;
- Familiarity with machine learning concepts and frameworks (PyTorch, TensorFlow) is a plus;
- Fluency in English (working language of the team).

Soft Skills:

- Passion for mathematical modeling, physics, and computer science;
- Eagerness to take initiative in a fast-moving startup environment;
- Excellent problem-solving and critical thinking skills.

5 Your Professional Outcomes

By joining deepmath, you will play a key role in shaping the development of deepmesh and advancing the boundaries of engineering simulation. Your work will directly influence the reliability, scalability, and performance of our technology, as well as the success of our projects. Concretely, this means:

- Driving innovation in deep learning methods for mesh generation and simulation workflows;
- Seeing your contributions integrated into a technology used across industry and research;
- Working in a startup environment where your ideas directly influence technical direction and product strategy;
- Leading projects from initial concept to integration in real simulation pipelines.

6 A Vibrant and Supportive Work Environment

We foster a workplace atmosphere that encourages well-being, creativity, and collaboration. As part of our team, you can expect:

- Your ideas and contributions to be valued. Our culture promotes open exchange and supports every team member in achieving collective goals;
- Flexibility to maintain a healthy balance between work and personal life, with schedules adapted to your needs and remote work options;
- Opportunities to stay at the forefront of your field through access to learning resources, conferences, and workshops.

7 Final Word

If you are excited to make a meaningful impact by advancing the frontiers of AI-driven engineering simulation, we would be delighted to hear from you. Please send your CV and a cover letter to liadpaskin@deepmath.tech, describing your background, motivations, and what draws you to this opportunity. All application documents must be submitted in PDF format, in English, with the CV named `CV_{lastname}.pdf` and the cover letter named `CL_{lastname}.pdf`.

We look forward to getting to know you better, *The Founders*.