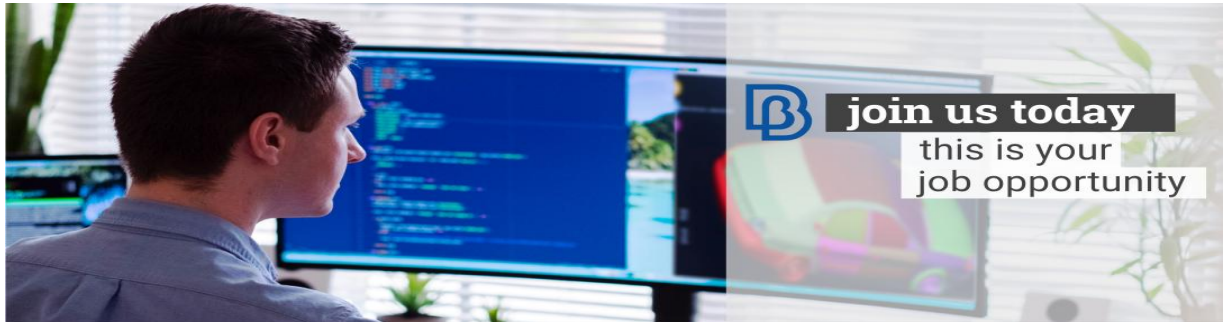


Software Engineer II - Physics-AI Engineer

Location: Kato Scholari, Thessaloniki



Join BETA CAE Systems, Greece, as a **Physics-AI Engineer** and become part of Cadence Design Systems, the pivotal leader in mechanical and electronic systems design.

Leveraging Cadence's Intelligent System Design strategy and BETA CAE's innovative engineering solutions, we deliver advanced products that empower some of the world's most forward-thinking companies across diverse industries such as consumer electronics, hyperscale computing, communications, automotive, aerospace, and healthcare.

In this role, you will operate at the intersection of engineering, numerical simulation, and machine learning. You will work to bridge current CAE workflows with the next generation of AI-enabled engineering products.

We are seeking an **AI Engineer** with a strong background in **Mechanical or Civil Engineering** to work on our simulation pipelines around material modeling and process simulations. You will design, train, and deploy AI models and surrogate systems that drastically reduce computation time for structural analyses, while maintaining high physical accuracy. Your focus will be on developing results prediction for structures, considering their manufacturing processes and methods. You will be working to capture the physics of stamping simulations, composite materials and laminated structures, and integrate them into finite element models or deliver as direct results to the analysts.

Your day-to-day will include:

- AI surrogate modeling, where you will develop reduced-order models and deep learning-based surrogates to approximate high-fidelity finite element analyses (FEA)
- Work on the physics of stamping simulations and composite materials, predicting manufacturability and key results for educating engineers' decisions
- Develop AI models to predict structural simulation results while incorporating physical laws to ensure physically consistent predictions
- Integrate and deploy machine learning models within engineering workflows, developing APIs and software interfaces for use by design and simulation teams
- Synthetic data generation, using existing simulation frameworks to create, label, and optimize datasets for deep learning models
- Develop validation pipelines that rigorously test the accuracy, latency, and failure modes of AI approaches against traditional numerical solvers



Qualifications & Experience:

- Bachelor of Science, Master of Science, or Ph.D. in Mechanical Engineering, Civil Engineering, or a closely related field
- Experience with commercial and open-source CAE/FEA software (e.g., NASTRAN, Abaqus, ANSYS).
- Solid understanding of continuum mechanics, and numerical methods
- AI/ML Proficiency and background in Python and deep learning frameworks like PyTorch or TensorFlow
- Familiarity with concepts of generative modeling applied to physical sciences
- Software Engineering skills in C++ and basic understanding of deploying models into production
- Proficiency in the English language

What we offer:

- Permanent employment contract following a six-month evaluation period
- Competitive salary package
- State-of-the-art and continuously updated equipment (hardware and software)
- Ongoing training in the latest technologies related to the field
- Opportunities for professional growth and skill enhancement
- Comprehensive private health insurance
- Employee Assistance Program
- Complimentary breakfast and lunch at the company dining hall
- Company-provided transportation to and from the premises
- Fully equipped on-site gym
- Participation in the company's Private Pension Fund (T.E.A.)
- Ample parking facilities with electric car charging
- Comfortable and modern working environment

Apply now for a place in our team!

We would gladly receive your application at: [Cadence Careers](#)